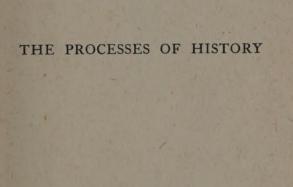


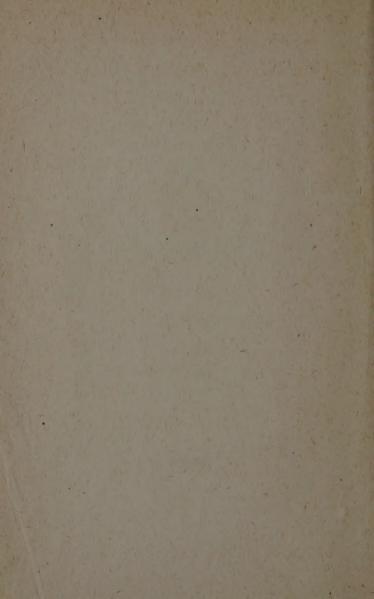
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The Processes of History

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PREFACE

The question "Is History a science?" has now been debated by successive generations of historians without any general agreement having been reached. It would seem, therefore, that in some particular the problem had been wrongly stated. Hence, following the critique presented in my Prolegomena to History, I have approached the whole matter from a new angle by asking what sort of results might be obtained by a strict application of the method of science to the facts of history.) The outcome of this procedure, stated in general terms, is an attempt to do for human history what biologists are engaged in doing for the history of the forms of life, and this publication offers in summary form a first analysis of the factors and processes manifested in the history of man.

For the sake of clearness, and in order that the essential considerations might be brought within a brief comprehensive view, the argument has been condensed and made as explicit as circumstances would permit. Since footnotes and cita-

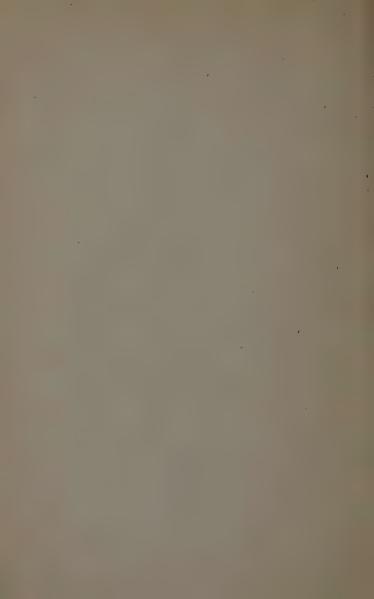
PREFACE

tions of authorities have also been eliminated in the interest of brevity and directness, it should be understood that there is no view expressed which, I believe, is not already familiar to students in one or another branch of humanistic inquiry. So far as I am aware, all that is new in the present contribution is the co-ordination into one consistent statement of results which are well known, but which are widely scattered throughout the literature of anthropology, history, political science, philology, education, geography, and other studies. Further than this, the most significant feature of the book is an insistence that, in dealing with a problem of this magnitude, the prime requisite must be an exacting care in regard to the method employed. Hence, it seems to me, that the questions for immediate consideration are: first, whether the problems of method have been correctly stated; and, second, whether the factors and processes indicated are correctly described.

More generally, there is no disguising the fact that the present world-situation is imperative in forcing men to question searchingly the validity of their own activities. Are, then, those of us who are engaged in the study of History doing all that

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lies within our power to make our inquiries contributory to the well-being of our fellow-men? We must admit that while, during the last fifty years, the students of Nature have most significantly enlarged the knowledge of the world in which we live, the students of Man have made no such striking advance in their field of investition. It is true that we have been persistent in the collection of facts, and in the refinement of the technique of investigation, but it would seem as if the utilization of all this accumulated knowledge in the spirit of modern science might now be undertaken. What, then, is presented here is a tentative statement, based upon the application of the method of science to the facts of History, made in the earnest belief that inquiry conducted along the lines marked out must ultimately lead to an understanding of the difficulties that beset our civilization, and to a furtherance of the welfare of mankind.



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THE NATURE AND SCOPE OF THE INQUIRY

1. Science is, fundamentally, a method of dealing with problems, and the initial step in any scientific undertaking is the determination of the problem to be investigated.

A survey of the present situation, in which men everywhere find themselves involved on one or the other side of a world-conflict, stimulates interest in the wide differences that exist between the many and various groups into which mankind is broken up. Thus, in the foreground, we are vividly conscious of differing characteristics when we speak of French, Belgians, and Italians, Germans, Austrians, and Magyars; and impressions associate themselves with the thought of Canadians, Australians, and New Zealanders which are not suggested by mention of English, Scotch, and Irish. But the present conflict is not restricted to inheritors of a western European tradition, and the sense of difference becomes

more acute when we turn to think of the eastern participants. Few of us have any extended firsthand knowledge of Russians, Rumanians, and Serbs, of Turks and Bulgarians, but even the daily recurrence of these names fails to remove the feeling that attaches to them of remoteness and unfamiliarity. Yet further off, in Asia, peoples of a wholly un-European aspect are, bearing arms in the same cause—Japanese, Chinese, Annamese; Sikhs, Rajputs, Afghans; Arabs, Kurds, Armenians; Buddhists, Brahmanists, Mohammedans. In what terms, indeed, do we think of the men who hold the Khyber Pass, of those who actually oppose each other when Turks and Russians meet in Persia, of those who carry on a European war in equatorial Africa? At best we comprehend vaguely that similarity of military equipment does not at once bring all these various races to the similitude of Englishmen or Germans. But behind the combatants, as it were, stand other peoples, now in the turmoil forgotten: tribes of furthest Siberia, unsubdued aboriginals of interior China, forest denizens of India, desert dwellers of Australia, peoples whose names are to us but as technical terms of anthropological specialists, peoples whose

strange implements we gather into museums, and whose uncouth ways provide materials, in every generation, for travellers' tales.

There are differences enough and to spare, and, at times, when the subject is brought forward, we recollect that in appearance, practices, and beliefs the men who people the earth are of the most heterogeneous description; but, ordinarily, we dismiss the fact, or entertain it momentarily as contributory to our self-esteem. These others, indeed, even though our comrades in arms, are 'different,' are 'backward,' are 'colored,' while we (whoever we may be) are 'civilized' and 'progressive.' With such indefinite phrases we escape the sense of a problem, and shield ourselves from the embarrassment of the direct question: "In what respect are these others different from ourselves?" So we are able to ignore the fact that even the 'white' race is not without its lowly members; and our complacence is unshaken either by observation of our own byways or by recognizing that such primitive groups as the Ainus of Japan, Maotzi of China, Todas of India, Veddas of Ceylon, and even the muchdiscussed aborigines of Australia have been classified as "Caucasian." Furthermore, though

the knowledge is a commonplace, we tend, in forming judgments of our contemporaries, to forget that, not many generations back, our own progenitors fought with crude weapons, wore skins, and painted their bodies. We tend, for example, to forget that even in the eighteenth century the civilization of China was regarded by European travellers as superior to their own. We ignore the consideration that our religion was derived from a land we now regard as 'backward,' and the fundamentals of our thought from a people whose present representatives we are disposed to patronize.

Nevertheless, the conflict has already had the result of lessening the exclusiveness and self-confidence of the western European, and has induced in him an awakening appreciation of the manhood and common human quality of outlying peoples. In truth, a new current of feeling has made itself felt, and we come to regard the differences and contrasts among men, not as a basis for disparagement, but as something to be explained. And here we may discern the nature of the problem with which we are confronted. Every human group, white, black, or yellow, entertains precisely the same attitude of superiority

towards all the others, and the vindication of this attitude in ourselves requires that we, for the sake of all, should endeavor to determine, not the reason for our own superiority, but how man everywhere has come to be as he is.

2. The problem so stated is not new, and many theories have been advanced to account for the manifest differences in human groups. Of these theories, the most popular and persistent is that which attributes the diversities among peoples to physical differences in race. Thus it is widely believed that difference of race implies a real and deep-rooted distinction in physical, mental, and moral qualities, and that the contrasts in the achievements of the various peoples are due to differences in physical characteristics. Hence it is thought that one race becomes a master because of its physique, courage, brain-power, and morale, while another sinks in the struggle or lags behind owing to its inferiority in these qualities. This view naturally implies that the same race preserves its character, not only in every region of the world, but in every period of history, and so the course of history would appear as a sustained process of selection between the races that are sluggish, cowardly, and retrogressive, and

those that are energetic, brave, and progressive—while the latter press forward, the former die out or stagnate in lazy passivity. A slightly different turn is given to the explanation by those who maintain that the present savage races are those which have been left impoverished and stationary as a result of the migration of their more vigorous or stronger elements; the younger and more alert in each generation, it is thought, go out to seek new homes, and leave the older and more conservative to perpetuate the original group.

While the explanation in terms of race has been supported, in recent discussions, by an appeal to biology, there can be little doubt that its principal foundation lies in that inevitable human propensity to classify all those who are in any way unlike ourselves, or who merely lie outside our own group, as 'fiends,' 'aliens,' and 'barbarians.' The Hebrews, though perhaps the best-known example, have not been the only group to regard themselves a 'chosen people'; and while we may point to Dante's opinion that the Romans of his time were ordained to command, and to the modern German equivalent of the same doctrine, it must be admitted that the passionate assertion of

nationality in the nineteenth century has been colored at least by this feeling of a special worth or importance in ourselves as contrasted with others, a feeling, we must not forget, which the Negro, Hindu, and Chinaman shares with the most progressive of Europeans.

Once entertained, the idea that there have been certain unique races in the past, and that there is one such race in the present, yields itself readily to interested elaboration. So the Hegelian theory has been replaced, on further consideration, by the view which sees all human advancement as the varied expression of the power and genius, not of the Absolute, but of the Aryan race; and while this conception permitted, at first, of a fairly generous interpretation, a more thorough application has restricted the definition of the conquering race to the dolichocephalic (or longheaded) blonds from northern Europe. Wherever this race has penetrated, there, it would appear, the surrounding peoples have been subjugated, and there prosperity and a great civilization have sprung up. So complete is this clue, indeed, that any manifestation of genius, whether in Palestine, Greece, Italy, or Germany, becomes an unequivocal proof of the presence of, at least,

some members of this supreme race. Conversely, wherever the brachycephalic (or short-headed) races have made their appearance, decadence has straightway followed; nor do the advocates of this thorough-going conception shrink from the conclusion that progress in the future must depend upon the increased propagation and the physical dominance of the long-headed variety.

An equally positive, though perhaps less animating theory places the emphasis, in seeking to account for the differences of human groups, not on the physical, but on the mental characteristics of races, and from this root has grown the extensive literature of "race psychology." According to this view, the part played in history by any aggregation of men is a direct reflection of its collective character and mentality. The subject and method of this psychology, initiated by Wilhelm von Humboldt, seems first to have been cultivated by Steinthal and Lazarus, but owes its vogue, apparently, to men like Mommsen and Renan. While the interest enlisted by the summary descriptions of the psychology of peoples has been widely extended, the explanation afforded by the procedure is not illuminating, for it consists merely in saying that events and insti-

tutions are the outcome of the genius of peoples. Thus, for example, it appears that the Greeks were a people distinctly marked out by nature as freer than other mortals from all that hinders and oppresses the activities of the spirit; or, briefly, that Greek civilization was the creation of the inborn genius of the Greek race. Furthermore, the mode of determining the collective characteristics of groups leaves much room for debate, since while one authority may regard the Celt, as "a gentle obstinate," another thinks him "turbulent and vain," and a third declares him to be the embodiment of "an indomitable passion for danger and adventure."

When pressed, each of these theories, physical and psychological, tends more and more to fall back upon the influence of habitat or climate in determining the character of groups, and we are thus led to consider the type of explanation offered by anthropogeography. It is argued, for instance, that all human varieties are the outcome of their several environments. Groups are what climate, soil, diet, pursuits, and inherited qualities have made them. What is true of man himself is no less true of his works, and so it follows that racial and cultural zones must coincide,

while a correspondence must exist between these and the zones of temperature. Hence we arrive at the theory that, in both hemispheres, the isocultural bands follow the isothermal bands in all their deflections. In this view, it is evident, all the specific characteristics of humanity—physique, temperament, institutions, occupations, and ideas—are the more or less immediate reflection of habitat, and it is maintained that each breed of man which has changed its place of domicile has had to adopt the type of culture appropriate to the region into which it has penetrated.

The forms taken by this theory of the dependence of man on habitat are very numerous, but a few illustrations may serve to suggest the wide scope of its applications. Thus it has long been held that the advancement of man in northern Europe was a direct result of the inhospitable conditions which forced him to cultivate unprecedented habits of industry. Again, it has been explained that the extremes of character attributed to the Slav are due to the extremes of climate on the wind-swept steppes. The long and bitter cold, it is said, has enabled the Russian peasants to survive, since it has fostered the spirit

of comradeship, and this, in turn, has held them together in their mir or village-community. The habitat, it also seems, provides the conditions which determine the progress or stagnation of the group, for agricultural tribes, being bound to the soil, are conservative, apathetic, and non-progressive, while the nomadic or semi-nomadic life sharpens the wits and calls forth courage, self-reliance, and ingenuity. By others, again, it is argued that the birth and precocious growth of civilization are encouraged by a small, isolated, and protected habitat, though at a later stage this cramps progress, and lends the stamp of arrested development to a people like the Greeks.

The types of theory thus briefly indicated have this in common, that they attempt to describe factors which may be regarded as operative in all human groups, and are thus to be considered as offering an explanation on a scientific basis. To all appearance, however, it has not seemed necessary to the exponents of these views to show how the factors described could have produced the differences which we see around us. Indeed, the mode of procedure adopted has been simply to explain evident differences by alleging the antecedence of other differences, less obvious, but

still unexplained. Knowledge is not really advanced by asserting that all human advancement has been due to the presence of some particular race. In point of method, the failure lies in the fact that the theory gives no insight into the processes through which the assumed physical superiority of the Arvan or Teuton has been transmuted into cultural advancement. But, taken on its own terms, and supposing, for the moment, that the beginnings of cultural development in China and India were associated with the intrusion of Aryans, the theory does not suggest how later advances have taken place in these lands, and it ignores the fact that there is ample evidence of notable advancement in Mesopotamia and in Egypt prior to any appearance of the Aryan race. Similarly, it throws no light upon the problem in hand to attribute the special cultural characteristics of a people to correspondingly particularized innate qualities.

In regard to anthropogeography, it may be said more particularly that it represents not so much an explicit theory as an almost unlimited mass of correlations, some vague and unimportant, others penetrating and of the highest value. In some respects, indeed, this subject, at once new and of

a remote antiquity, represents, at the present time, one of the most hopeful aspects of the study of man, for, from its association, however indeterminate, with geology, it has gained a breadth and an inclusiveness of vision that has been denied the better established humanistic studies. Nevertheless, a too close association with a science already highly elaborated, and a too great dependence upon the work of pioneers who had not fully entered into the spirit of modern scientific method, have led to a logical formalism in dealing with its subject-matter which has not wholly been in the interests of scientific progress. Anthropogeography, in short, provides a great body of observations assembled under logically arranged headings, but has failed to recognize that investigation to be effective must be conducted in presence of a specific problem.

Furthermore, in the actual consideration of the influence of habitat upon human affairs, there is almost invariably apparent, on the part of geographers, a certain laxity in regard to the facts of historical change. Though habitat and climate have, in general, remained constant throughout the historical period, civilizations have arisen and decayed, to be followed by other civiliza-

tions under different environmental conditions. If it is the hardy northerner who is 'progressive' at one time, at another it is the Akkadian and Sumerian in the hothouse of the Persian Gulf. If the village-community is a response to the relentless winter of the Russian steppes, it has also persisted in torrid India. Egypt, Phoenicia, Crete, and Greece may possibly be regarded as protected areas, but if the rise of civilization is dependent upon isolation, how shall we account for the early development of Lagash and Nippur? How, too, shall we account for the absence of such developments in a hundred spots more isolated and protected still? If Greek climate and habitat are to be accepted as prepotent influences in the production of Periclean Athens, and German climate and habitat as determining factors in the development of the military power of today, why have not these relatively constant factors been equally operative in past and present times?

Evidently, then, neither the race theory, nor that of habitat offers an adequate basis for an explanation of how man has come to be as he is, and hence we are driven to inquire what other types of theory have been advanced.

3. From a wholly different point of view there has been presented a theory to account for the inequalities among men which has been accorded an acceptance as wide as the theory of race, but by a very different constituency, for while the former may be said to appeal more directly to militarists and certain groups attracted by modern biological ideas, the economic theory of Marx and Engels has found the great body of its adherents among the workers immediately involved in the "class struggle."

Fundamentally, the point of departure of Marx is the idea that the economic factor dominates all the other factors of human existence, and his insistence on this view, notwithstanding the exaggeration it involves, has had the beneficial effect of directing the attention of students to the importance of a series of facts which, previously, had been very generally ignored. In a measure, Marx also may be said to have employed the method of science, for what he attempted to do was to isolate and describe a particular factor or process manifested in human affairs. But in this undertaking, notwithstanding the profound influence which his writings have had upon modern thought, the limitations of his outlook, and

his imperfect appreciation of the complexities of the problem, have stood in the way of a permanent success. It should, however, be remembered that Marx did not set himself to work out a scientific problem, but to carry forward a social propaganda; he was not attempting to analyze the elements of history; his interest was excited by the special problem of labor under modern conditions, and his dominating aim was to account for this particular phenomenon in its present aspect. Hence he neither considered the entire field of economic activity in modern life, nor the conditions of labor in any other than the capitalistic form of society.

It must not be supposed, however, that Marx and Engels, while maintaining that the great moving power in all historical events was the economic development of society, failed to recognize that they had investigated only that form of economic organization under which they themselves were actually living. "We ought," Engels remarked, "to study, at least in their essential features and taken as terms of comparison, the other forms which have preceded it in time, or exist alongside of it in less developed countries." And he stated frankly: "Marx and I are partly

responsible for the fact that the younger men have sometimes laid more stress on the economic fact than was necessary"; but this overemphasis, as he explained, arose from the exigencies of the debate into which their main contention precipitated them. It is not remarkable, therefore, that the Marxian interpretation of history should have failed to elucidate the means through which so different results have been arrived at in Asia and in Europe, in ancient and in modern times. The fault, if there be any, lies not with these great initiators who demonstrated the practical utility of an investigation of the elements of history, but with their successors who have failed to carry forward and to broaden the scope of the inquiries which they set on foot.

This theory, then, like those previously mentioned, is unacceptable as an explanation of how man has come to be as he is, for, like the others, it is based upon a limited view of the facts, and represents a projection of a single factor upon the complexity of human experience. Practically speaking, the failure in all these cases has been due to a lack of appreciation of the necessity of a preliminary study of method. To be acceptable, any such theory must be applicable to 'backward'

as well as to 'advanced' groups; it must apply equally to all periods of history in all lands; it must apply, furthermore, to the 'backward' and 'advanced' members of all groups, and hence to the experience of the individual in the world today.

4. The number and variety of the theories which have heretofore been advanced should be convincing proof that in approaching a problem of this magnitude we must first endeavor to arrive at a clear understanding of the method to be followed in conducting the inquiry. There can be no question that the investigation before us must rest upon an examination of the facts of human history, for we ourselves are aware that any present situation in which we may happen to be involved is the outcome of what has gone before. But the practical problem with which we are confronted appears only when we come to ask how the concrete facts of history-are to be utilized in order to explain the status of man as we find him everywhere throughout the world.

During the nineteenth century, and indeed up to the present, the student of history has carried on his work in accordance with the assumption that such an explanation would be afforded by a

statement, in the form of narrative, of what had happened in the past.

Now, of all possible modes of explanation, the earliest and the most universal is that naïve form which is represented in story-telling. This consists in going back to some selected beginning, and carrying forward a narrative of happenings from that point to the situation which the narrator has undertaken to make clear. It matters nothing that, in its earliest manifestations, historical narrative starts with some imaginary beginning, such as the Mosaic account of Creation or Hesiod's Golden Age, the principle is the same in all cases, namely, the acceptance of a situation that comes first, and the emergence from this of a complexity which has its conclusion in a known eventuality.

The initial difficulty for the historian, once his starting-point has been decided upon, is that he cannot include all the available facts of past occurrences in the narrative which as a literary artist he is bent upon creating. The creation, as in all art, involves the selection of facts for presentation, and while this selection must depend ultimately upon what the narrator or artist himself is, it can be made only in the light of some

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conception he has formed of the course of events, of some interest or emotion awakened by what he believes has taken place.

The most obvious basis of selection is the interest enlisted by what is simply curious or unusual. This is represented, in earlier writings, by the miscellaneous nature of the records set down by medieval chroniclers and annalists, and, in the work of contemporary scholars, by the recurrent statement: "What really happened was not what you and everyone else has believed, but this that I alone have discovered." On a broader plane, the selection is determined by the interest taken in the outcome of some specific series of events, more particularly when this leads to an impressive dénouement, such as the defeat of Xerxes by the relatively insignificant forces of the Greeks. As, however, events but rarely work out to a completely satisfactory ending-witness Thucydides -historical writers have fallen back upon the method, characteristic in the drama, of depicting personal character revealing itself in the stress of critical circumstances. Following this line of development, historiography has tended to emphasize the part played by the individual in what has happened, relying more and more for its ex-,

planations upon the speculative interpretation of individual motives, and justifying this procedure on an assumed similarity of the workings of the human mind in similar situations.

At a later stage, reflection on the seemingly meaningless changes of fortune revealed in events leads to the conscious effort to reach an explanatory basis through the formulation of some concept of the underlying meaning of the course of history. Thus, for example, one recent effort is directed towards showing that the meaning lies in "the existence of a mental conflict as to the means by which happiness is to be attained," while another discovers history to be "the story of man's increasing ability to control energy." Such projections of abstract points of view have been infinite in their variety, ranging from that of Orosius who saw in events the hand of God so ordering at all times the affairs of men that dire calamity should unfailingly overtake neglect of his service, to that of a contemporary who believes that "modern science is crowned by the conception of an ordered progress in history." But while, at this point, an extended résumé of theories would be of advantage as emphasizing the fact that every successive generation attains

new points of view, one must perforce assume familiarity with such expositions of philosophies of history as have been provided by Flint and Barth, for what is really germane to the present discussion is the residual fact that today the search for an underlying principle in history is dominated by the concept of "progress."

It may be well here to point out that the idea of "progress" stands in much the same relation to the study of man as that of "evolution" to the study of the forms of life. But, whereas, in the hands of Darwin, the study of biological evolution passed from the merely speculative into the scientific stage, the study of human progress is still in the pre-Darwinian period. Thus the sociologist still sets before himself the aim of discovering "the law of progress," while the historian, assuming "progress" without further question, displays in narrative form the gradual emergence of features which he personally regards as distinctively modern or as particularly desirable. In neither the one case or the other has the investigator concerned himself to apply to the subjectmatter in hand the method of analysis by which Darwin was enabled to substantiate the specu-

lative concept of "evolution" by the scientific theory of "natural selection."

If we are to appreciate the implications of the idea of "progress," it will be necessary to observe that this concept is based upon the assumption that history—the entire course of events in time is unitary, that it constitutes a single sequence of happenings in which progress is revealed. Now, disregarding the use which is being made of this idea in contemporary philosophical discussions, and concerning ourselves only with its place in historical study, it will readily be perceived that the concept of "progress" is just the reflection of a convention in accordance with which we base our presentation of what has happened on the records handed down to us by certain European peoples with whose languages we are more or less familiar. Frankly, our concepts are at the mercy of such information as we have at command, and so the term "ancient history" suggests, not diversified series of facts embodying the experiences of mankind during a certain period of time, but a narrative restatement of accounts which record the varying fortunes of some of the political units of Mediterranean lands, more particularly Greece and Rome. We of the twenti-

eth century, with all our opportunities for acquaintance with the history of Asia, have not risen above the limitations of our predecessors, and continue to imagine that we have arrived at a synthesis of human history when we have constructed a narrative by selecting parts or periods of the history of one European country after another which seem to us as of special and peculiar significance. On the other hand, if we look a little further, it will be to discover that human history is not unitary, but pluralistic; that what we are given is not one history, but many; and, that the concept of "progress" is arrived at by the maintenance of a Europocentric tradition and the elimination from consideration of the activities of all peoples whose civilization does not at once appear as contributory to our own.

What, then, is essential for us to realize is that the methodological assumption upon which the work of the historian is based, namely, that we may hope to arrive at an explanation of how man has come to be as he is through the narrative statement of what has happened in the past, is, critically considered, inadmissible. Narrative is a form or genre of literature, and in this lies its forceful appeal, for, so long as men endure, the

tale of what men have done, and how they have striven, will never lose its interest and attraction. Furthermore, so long as men continue to question the meaning of life, the attempt will be continually renewed to grasp the ultimate significance of the course taken by events in the past. But beyond the romance of human deeds, and quite apart from any effort to penetrate the inscrutability of fate, there remains for scientific investigation the vital and fundamental problem how man in all his diversity has come to be as we find him now.

There are many histories, and this pluralism reveals our task as historical students, which is not to explain occurrences by the intercalation of hypothetical motives, or to create narratives based upon the selection of events which seem to us of importance in view of some unverified theory of progress, but to compare these several histories with the object of ascertaining what it is they hold in common. The fact is that an understanding of "how things have come to be as they are" can be arrived at only through a study of what has happened in the past, but this understanding is not furthered by the conventional construction of narratives. What is requisite is

that we should compare the events, the things that have happened, without the intervention of the subjective interests, often unacknowledged because unconsciously held, of historical writers. Precisely what we need to begin with are great bodies of historical data, annals or fasti, relating to all human groups without distinction, which have not been subjected to the selective activities of the literary artist and the philosopher.

Having thus seen that the conventionalized method of the historian is inadequate, it now remains to inquire how the concrete facts of history may be utilized in dealing with the problem before us.

5. As it is imperative for us to arrive at an understanding of the method to be employed in dealing with the problem of how man has come to be as he is, and as the narrative method hitherto relied upon by the historian sacrifices the wealth of concrete detail to the personal or speculative interest of individuals, it may be well to observe how men in other fields of history, such as Astronomy, Geology, and Biology, have conducted their investigations.

In the first place, each of these subjects is confronted with the complexity of a present status

which is assumed to be the outcome of all the changes that have taken place up to the present time. Secondly, in each of these cases the object or aim of the investigation is to arrive at an understanding of how this present status has come to be as it is, and the inquiry takes the form of an examination of the nature of the changes which have taken place.

What disguises the identity of the problem that presents itself to the student of nature and the student of man is that while the latter is provided with a great body of dated evidence for what has happened in the past, the former is left without any strictly chronological data, and is forced to be content with a merely relative time-order in his historical facts. In short, in his efforts to interpret the records of the past, the historian of nature is deprived of the assistance of the testimony of human witnesses. Nevertheless, while this handicap has immeasurably increased the difficulties in his way, it has not prevented him from contributing in a most notable manner to the sum of human knowledge.

It may fairly be said that the greater success of the student of nature in arriving at a scientific method for dealing with any history has been due

to the greater difficulties which he has encountered. Thus while the historian of man has engaged his efforts in creating narratives based upon details arranged in chronological order, the historian of nature has been forced to prove that the facts upon which he must rely may even be regarded as historical data. Indeed, this proof was the main endeavor of the great group of scientists in the first half of the nineteenth century whose work may be said to have culminated in the publication of Darwin's Origin of Species in 1859. The difficulties of the situation in which the advocates of an historical point of view were placed, not the least being the almost universal acceptance of the theory of creation, necessitated a careful consideration of the method to be employed, and so forced the recognition of the axiom that any present status is to be regarded as the outcome of the continued operation of natural processes, which was accepted as the task of science to discover.

Thus the geologist, having arrived at criteria for determining the time-order of strata, proceeded to examine the disposition of the rocks in every accessible area of the earth's surface. Now, while the rocks are assumed to have been

laid down, as a result of the operation of natural processes, in horizontal layers, they are actually found in an infinite variety of positions. Hence it became necessary to show how these dislocations had been effected, and what one might speak of as the explanatory "stock in trade" of the geologist consists in the series of processes which are manifested in the geological history of the earth. As a result of this way of looking at things, the geologist comes to see around him the evidences of how the earth has come to be as it is, and he comes to regard the landscape before him, not merely as a static disposition of picturesque form, and light and shadow, but as an embodiment of constant activities which, in the course of time, have brought this scenery to its present aspect, and will continue to modify it throughout all time to come. He can still feel the grandeur of the Alps, and still appreciate the beauty of Fujiyama, but in addition to the aesthetic pleasure, the sights convey to his mind an added wealth of suggestion regarding the ceaseless workings of Nature.

Again, the biologist has in all times endeavored to account for the infinite variety of the forms of life, but even in the eighteenth century no further

progress had been made than is represented by the belief that species were just so many distinct and permanent creations of God. In the nineteenth century, however, a new perspective was gained, and men began to perceive an historical depth in the relations of species. When the systematic classification of plants and animals had been carried to a certain elaboration, it was discerned, through the co-operation of geology, that the arrangement in order from simplest to most complex represented a time-order from early to late. As an additional result of the close association of geologists and biologists, the latter also adopted from their co-workers the axiom that things had come to be as they are through the continued operation of natural processes. Darwin's method, in fact, is just that of his geological contemporaries applied to a new subject-matter; and his object was the discovery of the process or processes through which new species have successively come into existence. In other words, what he planned to carry out was an analysis of the elements of biological history.

Whether Darwin was successful in his undertaking is for biologists to decide, though up to the present time they have not given sufficient

attention to his method and to the nature of the assumptions upon which his theory was based. All that need be observed in the present connection, however, is that, in putting forward his theory of "natural selection," Darwin believed that he had described the process through which the forms of life have come to be as they are today. Should it nevertheless appear that "natural selection" is inadequate to explain the origin of species, this conclusion would not invalidate the fundamental assumption that such processes are actually in operation; it would simply mean that Darwin's particular attempt at analysis was incomplete, perhaps even erroneous throughout. What would then remain to be done would be to make an entirely new analysis with greater regard to precision in method. It must be remembered, whatever the decision, that the theory of "natural selection" has created an interest in even the lowliest forms of life that did not previously exist, and that it has opened the eyes of men, in a wholly new sense, to the ways by which Nature accomplishes her ever varying and ever wonderful results. Nor should it be overlooked that the method of historical inquiry by which the natural scientist has attempted to explain how things

have come to be as they are, has led to results which have been of the highest practical importance to mankind.

It has been suggested above that astronomers, geologists, and biologists have been compelled to conduct historical inquiries without the aid of specifically dated materials, and there can be little doubt that this deficiency has not only been difficult to overcome, but has, in the case of biology, at least, led to far-reaching controversies and misunderstandings, and even to unconscious assumptions which have become stumblingblocks in the path of knowledge. When, therefore, we consider the obstacles which have been encountered by the students of nature, it must be apparent that the student of man is placed in a unique and enviable position, through the possession of dated evidence, for the investigation of the elements of human history. Indeed, the chronological record, incomplete as it is, frees the human historian from some of the greater difficulties by which the historian of nature is confronted.

On the other hand, it would seem that this unparalleled aid to investigation has, in itself, threatened to become an insurmountable obstacle

to the advancement of science, for the interest excited by the effort to perfect this record, blinds us, apparently, to the infinite possibilities which it places in our hands. The historian, fortified by an ancient convention, is so completely absorbed in the details before him, and in perfecting his own critical technique, that he leaves to one side the wider problems of historical method. When, however, these problems are actually taken up, it comes to be seen that historical method is the same whatever the history investigated—whether that of the stellar universe, of the earth, of the forms of life upon the earth, or of man. It comes to be seen that in each case the problem is the same, namely, to show how things have come to be as they are; that in each case the investigation presupposes the antecedence of innumerable series of historical events; that in each case the inquiry is based upon the assumption or axiom that things have come to be as they are through the continued operation of natural processes, and that these processes are to be discovered only through examination of what has happened in the past. And here it must be clearly stated, since this is a point upon which much misunderstanding has arisen through Darwin's acceptance of

Lyell's method, that the investigation of the processes of change must be based upon the facts of history, and cannot be discovered by examination of the results given in the present. On the other hand, if our inferences from the historical data are correct, they should be verifiable by application to things as they are.

6. It has been urged repeatedly that the endeavor to arrive at an analysis of the elements of history is no longer "history," since this, of necessity, has its sole end in narrative. It might be urged in contravention of this argument that the word "history" originally meant "inquiry," and only secondarily came to be applied to the embodiment of the results of inquiry in the particular form of narrative. But, in reality, the situation is too serious to admit of debate in regard to the application of a word having already many recognized meanings. "History," in the widest sense, means all that has happened in the past, and, more particularly, all that has happened to the human race. Now, the whole body of historical students is in possession of a vast accumulation of information in regard to the former activities and experiences of mankind, and the problem which is uppermost at the pres-

ent time is how this accumulated information—which already far exceeds the possibility of statement in any narrative synthesis—may be utilized to throw light upon the difficulties that confront mankind. In the world as it is today, is the historical scholar to look forward to contributing the results of his specialized researches to some later Cambridge Modern History, or is he, on the other hand, to entertain the hope that his investigations may stand beside those of the biologist, for example, as contributing, through an added knowledge of the operations of nature, to the welfare of the human race?

Yet, while there are many who insist upon the conventional aim of reducing all historical facts to narrative, there are unmistakable evidences that other historical students are seeking a new outlet for their activities, and a new utilization for their knowledge. It is only necessary to observe the interest accorded to Lord Acton's project for a History of Freedom, it is only necessary to take cognizance of the studies which multiply daily on the religious, economic, geographical, and other phases of modern history to see that men are reaching out in directions unknown to the older historiography, directions which are

manifestly tentative approximations to a scientific standpoint. For the undercurrent of all this awakened interest is analytical; and whether we set ourselves to isolate the strand of "freedom" or that of "class struggle," the influence of "sea power" or that of "religious revivals," we are contributing, in the long run, to an analysis of the elements of history.

Only an optimist, however, would suggest that this new movement in historical study had found itself, and was thoroughly conscious of its methodological foundations. The fact is that while we are gradually escaping from the dominance of narrative we have not as yet acquired the width of outlook necessary for the pursuit of analysis on a truly humanistic basis. Our vision is still focussed upon Europe and the doings of Europeans, and while we look with a kindly interest at "the map of the world as known to Herodotus," we seem unable to appreciate the fact that relatively the scope of our own historical inquiries is less extensive than his. By one or another eminent contemporary authority, the study of history has been regarded as limited to the investigation of written documents; as limited to the Christian era; as limited to southern and

western Europe; as limited to political events. Nevertheless, there has long been a tendency towards a wider outlook, but, as a matter of fact, the development of this broader interest has been forced to wait upon an extension of knowledge which has only been achieved within the last few decades through the progress of archaeological discoveries and of Oriental studies. With this difficulty removed, we may face the situation that the analytical study of history must be founded upon a comparison of the particular histories of all human groups, and must be actuated by the conscious effort to take cognizance of all the available facts. If this seems too much, let us remember that in a generation we have moved back from Greece to Egypt, from Egypt to Babylonia, and that now, thanks to the Carnegie Institution, an even more remote vista has been opened up by the excavations at Anau. The minimal unit of history is not a series of empires, following each other in time, from the plain of Shinar to the British Isles, but the continental mass of the Older World taken as a whole, and throughout the time occupied by the generations of men. Only with such an outlook may we hope, through the application of analysis, to discover the factors

and processes of history, and thus arrive at a scientific knowledge of the way in which man has come to be as he is.

Observation of the groups into which mankind is broken up leads us to question how the differences between them have come to be what they are, and hence to examine such explanations of the problem as have hitherto been advanced. A consideration of certain typical solutions that have been offered brings us to the conclusion that in every case these have been based upon a restricted view of the facts, and thus forces upon us the necessity of taking up the entire problem anew.

Seeing, however, that this problem is one of the greatest magnitude and difficulty, it would seem to be a proper precaution, in advance of embarking upon the undertaking, to examine the methodological equipment on which we shall be forced to rely. As a result of such an examination, it becomes apparent that the traditional method still adhered to by the historian, the statement of what has taken place in the form of narrative, does not lead to any explanatory conclusion; and

so, if the whole attempt is not to be abandoned as vain and chimerical, it becomes necessary to find out how investigators have proceeded in other fields of history. This leads to the discovery that geologists and biologists utilize the historical information at their command, not for the purpose of constructing narratives of happenings, but to determine what have been the processes through which things have come to be as they are.

The point of view thus gained at once clarifies the situation, for it reveals the significance of the chronological data which the human historian of today has inherited from his predecessors; it throws light upon the nature of the activities of a large and increasing number of historical students; and it displays the importance and utility of the great residuary body of historical facts which historiographers have been unable to incorporate in their narratives. Furthermore, it shows that the objections which have been urged regarding the application of scientific method as falling within the province of the historical student are negligible, for a knowledge of the factors and processes of history can be arrived at only through the study of history, and this type of

inquiry provides an opportunity by which the extraordinary wealth of dated material that is characteristic of human history may be made to subserve the highest interests of mankind.

II

THE GEOGRAPHICAL FACTOR IN HISTORY

1. Having arrived at a formulation of the problem to be investigated, and at a general conception of the method to be followed, it next becomes necessary to consider the character of the evidence to be employed. Freeman was far from being alone in the belief that, while the recovery of the ancient records of Eastern peoples was to be regarded with pleasure, the historian could not accept these as materials for the study which was his own. This is an artificial distinction and an improper limitation to research, and, indeed, the greatest obstacle to the scientific study of history has been the conventional attitude, of which this is an example, by which the attention of historians has been restricted to Europe and the activities of Europeans, for such limitation would impose an absolute bar to the application of the comparative method. If, however, the many histories with which we are confronted, histories of

India, China, and Europe, are to be compared, this involves the assumption that the essential content of history is everywhere the same, that human history is made up of the same materials throughout, and woven upon the same loom. Simple as this declaration may appear to be, it involves conclusions of such far-reaching importance that it becomes essential to examine the bases for an acceptance of the homogeneity of history.

Europe and Asia are indissoluble, and are separated in name only. When we stop to consider the map of the eastern hemisphere it is at once apparent that Europe is just a westward extension or peninsula of the great land-mass of Eurasia. The convention by which we regard the two continents as divided is not an outgrowth of modern geographical knowledge, but represents simply a traditional nomenclature which we have inherited from immemorial antiquity. Physically, Europe and Asia are continuous: the great northern plain of Asia penetrates into the heart of Europe; the mountain barrier which, alternately expanding to enclose great basins like those of Hungary, Persia, and Tibet, and focussing in knots like the Alps, Ararat, and the Pamirs,

stretches from Atlantic to Pacific, is crossed only by occasional passes; the line of depressions, conspicuous in the Mediterranean, runs through the Black, the Caspian, and the Aral seas, through lakes like Balkash, Issik, Zaisan, and Baikal, from west to farthest east; the desert belt lies stretched, a veritable cincture, Sahara, Arabia, Iran, Turkestan, and Takla Makan, across the body of the older world.

Again, if we consider the distribution of peoples, there is no point at which we may draw a line of separation between Asia and Europe. There are representatives of European stocks to be found throughout the eastern continent, while, conversely, in the West there is no nation without its quantum of Asiatic blood: there are Finns in the North, Mongols in Central Europe, Arabs in Spain, Turks on the Aegean, and Semites everywhere.

Furthermore, in their history, the two parts of Eurasia are inextricably bound together. Mackinder has shown how much light may be thrown upon European history by regarding it as subordinate to Asiatic; and while we may question Ujfalvy's saying that Rome fell because the Chinese built a wall, we cannot deny that the

ancient history of Europe is as incomprehensible without a knowledge of the Nearer East as medieval history without reference to the migrations of Asiatic peoples from the northern steppes. The oldest of historians held the idea that the epochs of European history were marked by alternating movements across the imaginary line that separates East and West; to us these movements are distinguishable in remotely prehistoric times, they have left their legible traces on the languages we speak, they are evident in periods of Greek history unknown to Herodotus, and are already modern with the expeditions of Darius and Alexander, with the appearance of Huns and Moslems in the West and of Frankish kingdoms in the East. The tide has turned, we may say, since Russia conquered Siberia and Britain became paramount in Hindustan, but the East has not been vanguished, and, possibly, the returning tide may not long be delayed.

Something more than this intimacy of relation, however, is necessary in order to demonstrate that the history of man in Europe and Asia is homogeneous. The fundamental basis of argument for holding that the History of man everywhere is of the same fabric, does not rest upon

the interconnections of events, but may be stated in the form that the varying experiences of human groups have been similarly conditioned by the varying aspects of the conformation of the globe. Man cannot escape the physical world in which he lives, nor its infinite diversification; this is obvious, but it will require some illustration to make clear the fact that the even-handed dominance of nature leads inevitably to widely different results in the lives of men.

2. Europe is visibly a projection from the block of Eurasia, but if we examine the configuration of the larger area it will be found that there are other projections to the south and east. India, indeed, is easily recognizable as a peninsula, but China lies quite as completely outside the quadrilateral of the central mass. Comparing these three, which, incidentally, contain together by far the greater part of all the inhabitants of the globe, it will be discovered that China and India, though seemingly more closely united to the central block, are, from the point of view of human accessibility, much more completely set apart than Europe. For while the latter lies exposed and open to the center, through the level plains of Russia and the convenient approach of the

Aegean and the eastern Mediterranean, the former lie behind the protecting bulk of the highest and most difficult mountain system in the world. Hence India may be reached only by utilizing one or other of a few tortuous routes through the towering mountains on its northwestern frontier, while China, similarly, enjoys the protection of the inaccessible mountains of Tibet on its western flank, and of the wideextending deserts to the northwest. In either case, the routes by which the borders of the country may be reached are few and strictly defined, and are impracticable in face of an organized defence; and it will also be observed that both in China and in India the entire country stretches away from the gateway by which alone access may be gained, and the defence of this protects the land from molestation. In the case of Europe, on the other hand, all this is changed, for here there is no single or restricted strategic point at which the whole area may be defended, and, as a consequence, its penetration to the farthest recesses has been repeated and complete. Here, then, in its very simplest form is an example of homogeneity, inasmuch as the fortunes, expressed in history, of the inhabitants of these areas have

turned primarily upon the relative accessibility of the land.

The principal reason, apart from the concentration of attention upon the affairs of Europe, why this close dependence of history upon the irregularities of the surface of the earth has not been fully recognized, seems to be the unavoidable tendency to regard as interchangeable or synonymous the geographical name of a land and the title of its dominant political power. Thus we speak of "the history of China" thinking at once of political happenings and of a certain area of the earth's surface which we Europeans have agreed to call by this name. But the subject of the historian's discourse is not an actual physical land, he considers this only as the seat of a particular political organization, and hence a more careful usage would distinguish between the title of the political unit and the name of the country over which its jurisdiction extends. It would, indeed, obviate misunderstanding if we were to speak habitually of the governmental unit, coincident with the geographical area which we call "China," as the "Middle Kingdom," Chung Kwo, Hwa Kwo, or any of the titles used by the Li Min or Han Ten themselves, for then we

would recognize more easily that the political organization has not always been, and strictly speaking is not now, equated with the geographical area.

This consideration leads to the recognition of another aspect of homogeneity, which is, that the political organizations dealt with in History have all come into being at definite and restricted spots, from which, subsequently, they have expanded. Indeed, no intimate knowledge of history is necessary to reveal how limited were the original geographical areas from which grew the political units known as the Roman, Chinese, Russian, and British empires. A uniformity of this sort is clearly of interest in and for itself; it becomes of great significance, however, when we turn to examine the elements common to all such cases, and to see in these small beginnings the universal influence of geographical factors.

Various attempts, already alluded to, have been made to discover common elements in the beginnings of early civilizations. The difficulty in all these cases has been that the investigator has limited his observation to the lands of the Nearer East, and has failed to extend the comparison to all known instances of the emergence of political

units. So, while at first sight it may appear that these beginnings have some relation to the irrigable valleys of rivers like the Nile and the Euphrates, further consideration will show, on the one hand, that there were valleys of this character in which civilizations did not arise, and, on the other, that civilizations have made their appearance in quite different situations. Some part of the difficulty that has been experienced in the attempt to isolate the common factors in the different instances of the emergence of advanced groups is unquestionably due to the use of such vague and all-inclusive terms as "civilization." If, however, we restrict the inquiry, for the moment, to the beginnings of political organization, a working basis for comparison will be obtained which will be found to lead to definite and verifiable results.

When, therefore, we come to compare the different cases in which political units can be seen to emerge, it is first to be observed that these units are restricted in every case to small areas, and, when the common character of these areas is examined, it is demonstrable that they are termini of routes of travel, and hence points of pressure

which have been strictly determined by the physical conformation of the earth's surface.

It may be well, as far as possible, to envisage the situation. South of the great Eurasian plain, the mountain barrier and the desert belt offer very real obstacles to human movement; the actual ways, restricted to practicable passes and sufficiently watered routes, provide but limited possibilities in lines of travel. Hence supposing that any considerable body of men should, for any reason whatever, be driven from an established habitat to seek a new place of abode, the world would be "open" to it only in the most general sense. In such a case, indeed, any one choice would severely restrict all the movements that were to follow, and with each step in any given direction, the options for the future would become ever fewer. If now we turn to observe the habitable extremities to which the routes lead, it is manifest that a theoretical first migrating group will settle down where conditions are endurable, but a second will find itself confronted by the first as occupants in possession. In whatever manner this situation may be met, and in certain cases there is evidence that the earlier group moved on, the time comes when the ques-

tion of occupancy must be fought out at the gateway. In other words, while a little effort will serve to move a single railroad car on the track, a long line of cars lying ahead cannot be set in motion by any amount of mere human pressure exerted at one end.

Where these conditions have been fulfilled, political organizations have arisen, sooner or later, throughout the Eurasian continent. Thus in China and in India, which, as has already been pointed out, are pockets on a gigantic scale, the earliest appearance of political units is just within the entrance or opening. Something of the same general character is to be seen in England, where the earliest political units came into existence along the line of greatest exposure to the continent, while, just as in China and India, the population of the more remote and inaccessible areas of the kingdom have scarcely been politicized up to the present day.

All the termini of routes are not, however, of this Indo-Chinese pattern, and Mesopotamia affords an example of a different kind. Here, indeed, is a land which is accessible from every quarter, so that it may be regarded as the focus of routes leading in from different directions.

Nevertheless, the phenomena exhibited are of exactly the same character; political organizations come into existence at the point of pressure, and the only difference between this case and the former is a difference in the degree of exposure, which turns, not upon the activity of men, but upon the physical disposition of mountains, rivers, and deserts. Furthermore, if we think of the Euphrates and Tigris, we may see that as water would rise in a river in presence of some obstacle, political units make their appearance higher and higher upstream as successive entrants make their way along the different avenues of approach.

Stated thus, even in the most general terms, it becomes evident that everywhere the beginnings of political organization have been determined by the physical disposition of the land. It will have been observed, however, that this determinant influence of routes has been dependent upon the presence of human beings, that it comes into play only in case of the movement of peoples. Hence the origin of these movements becomes a matter of primary importance, more particularly as the homogeneity of history is further ex-

hibited in the dependence of these movements or migrations upon man's physical surroundings.

3. With practical uniformity, the view taken of the origin of migrations is that these movements have been the necessary outcome or manifestation of the "natural increase" or "automatic excess" of population. Nothing indeed could well appear simpler to the modern mind than this transference to earlier times of the typically nineteenth-century picture of ever flowing streams of emigration finding their way to distant colonies. Yet, convincing as it may seem, the explanation conceals a problem of some magnitude and complexity.

To reach the core of the difficulty, it may be pointed out that the great rise in European population during the last century and a half is an altogether exceptional phenomenon. At its very beginning, this increase deeply impressed the minds of thoughtful contemporaries, and, among others, Malthus took up the problem, setting himself "to investigate the causes that have hitherto impeded the progress of mankind." The object of the present inquiry might almost be stated in the same terms, but Malthus, possibly with greater discretion, limited his field of re-

search to an investigation of the effects, in the case of man, of the constant tendency in all life to increase beyond the available means of subsistence. Of this tendency there can be little doubt, and, later on, Darwin took it for granted that organic beings may be regarded as striving to the utmost to increase in numbers. He pointed out that the progeny of a single pair of any species, if unhindered, would soon cover the earth, and Malthus estimated that, under favorable conditions, the human race might double itself four times in every hundred years. Manifestly, however, no such "natural increase" takes place, either among animals or men, and the crucial point in the investigations both of Malthus and of Darwin was the nature and effect of the "checks" by which population is limited.

It was argued by Darwin that each organic being lives by a struggle at some period of its life, and, adopting the view expressed by Malthus that those who labor under any original weakness or infirmity would be the first to succumb, he arrived, by inverting the idea, at the conclusion that the survival of the fittest led eventually, not merely to a maintenance of the standard, but to the development of new species. As there has

been a marked disposition on the part of humanistic students to apply Darwin's hypothesis to the special case of man, it may be urged that Darwin's adaptation of Malthus' ideas should not be permitted to supersede Malthus' contribution in its own field. And this particularly since, notwithstanding the common tendency of animal and human population to increase, the difference in the nature of the "checks" applied in the two cases is so marked as to make separate consideration imperative. Among animals, as Darwin saw, the struggle is a direct physical effort, and results in the elimination of individuals unable to bear their part; among human beings, as Malthus pointed out, actual want of food is, practically speaking, never the immediate check. Indeed, what we have to consider in the latter case is the means adopted for the prevention of increase, for in no human group has population been left to grow with perfect freedom or without interference. The inquiry in the case of man must concern itself, then, with the results of means adopted, consciously or unconsciously, for the restriction of population; and hence at the outset we are confronted with a substitution of ideas in

place of the physical processes represented in "natural selection."

In beginning his examination of the influences which have retarded human advancement. Malthus set forth certain "propositions" which he regarded as axiomatic. First, he considered that "Population is necessarily limited by the means of subsistence," and, second, that "Population always increases where the means of subsistence increase." To the first of these an addendum might be offered, which, though by no means self-evident, is regarded by Bateson as axiomatic from the standpoint of the biologist. This may be stated in the form that, as population is necessarily limited by the means of subsistence, in normal stable conditions it remains stationary. Now it will readily appear that if this addendum is a true statement of the case, mere "natural increase" cannot be assigned as a reason for migration, and hence some other explanation must be sought to account for this phenomenon. It follows, therefore, that the nature of the arguments which may be advanced in support of the added "proposition" must be briefly indicated.

The point to be brought out is that owing to the

restrictive measures employed, primitive groups do not multiply to such an extent that an overflow of population takes place. Among animals, the individual arrives on the scene of life to accept the chances of a struggle in which the more vigorous and fortunate have an advantage; among primitive peoples, on the other hand, a continuance of the life of the individual turns, in the first instance, upon the decision of older members of the group into which he is born, and the chances of survival are arbitrarily limited by the forethought, for their own well-being, of those upon whom the new arrival is dependent. Writing in the eighteenth century, Raynal called attention to "that multitude of singular institutions which retard the progress of population." To convey a clear impression of the extent to which the "natural increase" of early or lower groups was restricted, it would be necessary to consider each of these various practices; for the present purpose, however, it will be sufficient to take as an example the influence of infanticide.

First, it should be observed that, in order to render population stationary, it would only be necessary that the restricting practices should affect a limited and variable surplus which would

remain after allowance had been made for the normal or average infant mortality of a given place and condition of life, and for the number actually necessary to maintain the full complement of the group. This being the case, it is of importance to notice that infanticide, the killing of newborn infants, has been practised universally throughout the world (until superseded in modern times by more remote methods for accomplishing the same ends).

It is not to be assumed that, in its earliest application, the practice of infanticide was inspired by any far-sighted concern for the food supply of later years. In its simplest form, the practice seems to have arisen from the readily appreciable difficulty that a mother finds in caring for more than one infant at a time under primitive conditions of life. At a very early period, however, it seems to have been definitely recognized that if all the children born were allowed to live there would not be food enough to support everybody. This truth, as has frequently been pointed out, would soon force itself upon the attention of islanders; and modern observers have reported that in certain islands from a half to two-thirds of all infants were killed at birth. When fore-

thought had once come to play a part, the practice of infanticide seems to have assumed some fairly definite form, and to have come, in a measure, under public surveillance. So while in one group the first or even the first two or three infants would be killed, in another all after the first three or four would be done away with. Twins, weakly children, those born on unlucky days or for whom the omens were inauspicious, children whose upper teeth came first, appear, in general, to have met with an untimely end. Before long the selection evidently came into close association with some conception of the needs of the group: Australian women are said, out of an average of six children, to rear as a rule two boys and a girl, and practically everywhere the ratio of boys and girls is a matter of special concern.

Owing to the interest excited by M'Lennan's theory of the origin of exogamy, the question of the prevalence of female infanticide has to a great extent overshadowed the more general problem. Here it may be observed that male infanticide seems to stand in the same relation to mother-rite groups that female infanticide does to patriarchal groups. In the former, since descent passes through the female side, girls are

preferred, and boys are less desirable; while, in the latter case, the conditions are reversed. So, too, where daughters could be sold for a good price to husbands, they would be valued, but where a dower had to be given they would be looked upon as a source of loss. Conversely, with the introduction of the custom of tracing descent through males, boys were preferred, more especially because the dead were dependent upon heirs-male for the sacrifices associated with ancestor-worship.

If the influence of infanticide in restricting numbers is to be fully appreciated, it must be understood that the practice was not a mere matter of individual caprice, but was commonly regarded as a public concern of moment to the group as a whole. The decision was not by any means universally left to the parents, and in some places the carrying out of the sentence was entrusted to professional practitioners. The most important aspect of the case, however, is that the infant had no standing in the group into which it was born—was veritably "a little stranger"—until it had been formally accepted into the kin. As van Gennep has pointed out, the attitude of the group towards the infant was one of self-

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defence, and it was necessary that the newcomer should undergo purification, and remain for a period in a state of probation, before the rite of admission was celebrated. Very generally, it would appear, the child was submitted to more or less public inspection, and the rite of acceptance was performed by the headman of the village or the head of the family group. At Athens the decision seems, primitively, to have been arrived at by a family council; later, the father made official announcement before the altar of Hestia as to whether the child was to be accepted or abandoned; finally, it would seem, the official ceremony was confined to acceptance—failure to celebrate the birth was tantamount to rejection.

Clearly, then, the practice of infanticide alone must have gone far towards limiting the numbers of earlier groups and rendering population stationary, and it must not be overlooked that this is but one of a number of such practices. That these methods of keeping population within bounds were effective may, furthermore, be inferred from the stability of the boundaries between different primitive groups, and from the widespread evidences of a persistent attitude of hostility towards strangers. The boundaries of tribal

territory, as Grierson has shown, are, in general, clearly defined, not merely by the natural landmarks of rivers, lakes, forests, and mountains, but even by artificial monuments. The borders are jealously defended, and, being on either side placed under the protection of supernatural powers who are believed to take upon themselves the punishment of venturesome intruders, are not violated without trepidation. Indeed, beyond the group boundary, the world was necessarily full of menace, for, among all lower peoples, the stranger was feared and treated as an enemy, and the relation between stranger-groups was one of persistent hostility. So, while Holsti has shown conclusively that primitive warfare consisted more of shouting and terrifying than of fighting with intent to kill, it is not to be assumed that the hostility was factitious; and the fact that peaceful intercourse between neighboring groups was limited in the extreme is shown by the custom of the "silent trade." Singular as it may appear, in this mode of bartering, traces of which are still to be found in every quarter of the globe, the traffickers not only do not address, but do not even see one another. The silent trade is simply a means by which enemies may mutually ex-

change goods, and at the same time remain in safety; "they, indeed, keep faith with one another, but in so doing they are actuated, not by any feeling of amity, but wholly by the wish to serve their own interests."

It cannot be asserted that the addendum offered to the first proposition of Malthus has the same axiomatic character as the statement that "Population is necessarily limited by the means of subsistence"; nor can it be demonstrated from statistics that "in normal stable conditions population remains stationary"; nevertheless, it may now be urged that there are weighty considerations which tend to substantiate such a conclusion. So, as the longevity of the savage is less than that of civilized man, and as the conditions of savage life undoubtedly have an appreciable influence upon fecundity, the prevalence of such customs as infanticide, not to speak of the influence of various forms of marriage, must have made anything like rapid increase of population impossible. Furthermore, all we know of the habits of lower groups, more particularly their dread of strange places and strange people, tends to confirm the view that such groups have long remained practically stationary in numbers. Fi-

nally, Keane points out that most African negroes south of the equator, most Oceanic negroes (Melanesians and Papuans), all Australian and American aborigines have remained in their original habitats ever since what may be called the first settlement of the earth by man; and, after an exhaustive inquiry, Willcox arrives at the conclusion that where the influence of Europe has not been deeply felt, notably in China, and in Japan before its opening to Western influence, population has been nearly or quite stationary or has actually decreased.

4. Presuming, then, that population in normal stable conditions remains stationary, that among primitive peoples there is no "natural increase" which would lead inevitably to migrations, it becomes pertinent to inquire how movements of

peoples have been brought about.

This suggests the second proposition of Malthus, that "Population always increases where the means of subsistence increase." If this be true, then, obviously, its converse must be true, and population will decrease when the means of subsistence diminish. The initial point for consideration, it will thus be seen, is not so much the rise and fall of numbers as the increase and decrease

of the food supply. Unfortunately, Malthus took up the case of diminution of numbers, not in relation to contraction of food supply, but merely as illustrating the recuperative power of population after such visitations as plague, pestilence, and famine. The direction of his interest led him to concern himself primarily with the mode by which subsistence is increased, and so he points out that population multiplies rapidly when, in new colonies, the knowledge and industry of an old state are applied to the unappropriated land of a new country. The most notable rise in population of which we have historical knowledge has followed upon modern improvements in agricultural methods, whether in old countries or in new. We may say, in short, that increase of population, in modern times, follows upon increased production of food.

It must now be observed that while increase of the food supply will permit more people to live upon the same area, there is no reason to suppose that this increase will lead to migration. And accepting the fact that we know of no period at which the earth was not filled up to the limit of existing conditions—Keane dates the complete occupation of the globe by man in the early pleis-

tocene epoch—and assuming, from what has been said, that any local advance would simply mean that a greater number would be supported on a given territory, we are still left without a clue to the explanation of the movements of peoples. If, however, we turn to consider, not the effect of an increase of the means of subsistence, but the effect of a decrease, the difficulty will, I think, be seen to disappear. If, briefly, it can be shown that populations have actually been driven forth in consequence of a shrinkage of food supply due to a lessening of the productivity of the land, a satisfactory explanation would be provided for the historical movements of peoples.

While the productivity of the land is increased by human activity, it may also be affected injuriously by the same means. Population shifts, for example, when the methods employed have led to the working out of the soil, leaving as a memorial "the abandoned farm." So, too, population has declined in more than one area when an invasion has been followed by a lapse to inferior methods of cultivation, as in the Euphrates-Tigris valley; or when, as in the Turkish dominions, forms of taxation have been introduced which bear with undue severity upon the agri-

cultural class. It is obvious, however, that these cases are incidental to a relatively advanced civilization, and cannot be utilized to throw light upon earlier situations.

What would appear to be a simple illustration of food shrinkage, with its accompanying results, is provided by Livy when he states that in Gaul, in the time of Ambigatus, whoever he may have been, a succession of abundant harvests led to a rapid increase in numbers, and that subsequently, to relieve the country from the burden of overpopulation, a considerable body was sent out to seek a new home. Paulus Diaconus relates that the same experiment was resorted to by the Langobardi, who, he says, divided their whole group into three parts, and determined by lot which part should go forth. Machiavelli, improving upon this, regards the increase as constant, and the method of division and emigration as an established custom. He seems, like many later writers, to have been impressed by Paul's explanation that the North, being colder than the South, is more healthy, and better fitted for the propagation of nations. He thought, indeed, that the whole country was called "Germania" because such great multitudes sprang up there, a

theory which evidently takes its rise in the etymology of Isodore, who imagined that the word "Germany" was derived from "germinare"; the same idea is represented in Jordanes, who traces the Goths to this "hive of races or womb of nations." While Malthus was inclined to follow Paul and Machiavelli, Gibbon doubted the regularity of these outpourings, and we can now see that the entire series of explanations, from Livy down, is simply an effort to account for the one known fact that migrations occur. Modern scholars, like Chadwick, prefer to attribute the movements in question to pressure from behind rather than to the effects of sporadic cases of overpopulation.

Climate is everywhere variable, and wet spells succeed dry spells in a halting rhythm. Good seasons may possibly stimulate population, but, after all, sporadic influences of this sort are not likely to have changed the face of the world by inaugurating the great migrations known to history as "the wandering of the peoples." A more significant effect may be attributed to a succession of bad seasons, particularly when these take the form of long-continued droughts. To observe the full effect of such occurrences it is necessary

to turn from Europe to Asia. Thus in the Northwestern Provinces of India, the meeting-point of the two great rain currents, scarcity of moisture is frequent, and from time to time the autumn rains fail completely. Then famine ensues, and the stricken people, to escape destruction, move blindly "in the direction of Mâlwa, that Cathay or land of plenty, where, in the imagination of the North Indian rustic, the fields always smile with golden grain and poverty is unknown." So, too, in southern India the inhabitants, similarly impelled, have been known to travel in thousands towards the distant hills. Here then is a force strong enough to overcome the most deeply ingrained immobility, and to break down even the strongest barriers of caste. Nevertheless, it is difficult to discover in an exodus of disorganized and starving beings more than a semblance of those movements which have played so conspicuous a part in the history of man. If, however, we consider the conditions existing in Central Asia, other important factors will be found to present themselves.

Since the end of the eighteenth century the idea has been widely entertained by linguistic scholars that the distribution of languages in Europe

is best to be explained on the hypothesis of a series of migrations of peoples from Central Asia. While the literature of this discussion is extraordinarily extensive, there does not appear to have been any concerted effort on the part of philologists to inquire into the origin of migrations, though as early as 1820 passages from the Zend-Avesta had been cited to show that a sudden lowering of temperature in northern Asia (attributed later to the coming of the Ice Age in Siberia) had compelled the population to seek a warmer habitat. On this basis, seemingly, the phrase "climatic change" has retained its place without substantiation from direct investigation. A new view of the matter was introduced in 1802 when James Bryce, discussing the origin of migrations, pointed out that "a succession of dry seasons, which may merely diminish the harvest of those who inhabit tolerably humid regions, will produce such a famine in the inner parts of a continent like Asia as to force the people to seek some better dwelling-place." It was not, however, until the narratives of recent explorers like Sven Hedin and Aurel Stein, at the opening of the twentieth century, had called attention anew to the presence of sand-buried ruins in Central Asia

that the underlying problem was vigorously attacked, and, this time, by geographers.

The active discussion of the origin of the migrations from Central Asia may be said to have been inaugurated in 1904 by two memorable papers in the Geographical Journal. In the earlier of these, Mackinder laid emphasis, first, upon the aridity of the heart of the Eurasian land-mass, its system of internal drainage, and the fact that it is not a continuous desert like the Sahara, but a steppe-land with alternations of desert areas and river-fed oases. Secondly, he pointed to the mobility of its horse-riding inhabitants—a factor which has also been dwelt upon by Demolins and Vidal de la Blache. In the discussion which followed, Holdich raised the question of the reason for the overflow of peoples from Central Asia, and was emphatic in his opinion that one of the great compelling reasons for all these migrations had been a distinct alteration in the physical conditions of the country. It is of some interest to notice, as showing the views held so recently as a decade ago, that Mackinder, in reply, considered that when you had the evidence of this constant succession of descents, it was quite unnecessary to ask for any explanation of it.

In the later paper, Prince Kropotkin developed the theory, on a broad geological foundation, that Central Asia is in a state of rapid desiccation; and, adverting to the existing evidences of a greater population in times past, stated the theory that "it must have been the rapid desiccation of this region which compelled its inhabitants to rush down to the Jungarian Gate, down to the lowlands of the Balkash and the Obi, and thence pushing before them the original inhabitants of the lowlands, to produce those great migrations and invasions of Europe which took place during the first centuries of our era." Here again the discussion brought out important considerations. Mackinder, while accepting Kropotkin's general contention, thought that there was a tendency to exaggerate the rapidity of the desiccation during the historical period; he was inclined to doubt that the invasions of Europe had originated in desiccation, but accepted Hedin's conclusion that the shifting of sand by the wind had frequently brought catastrophe to human settlements. Freshfield, citing various climatologists, was convinced that oscillation, not desiccation, in climate was what all the records pointed to. Mill called attention to the constancy of the

total rainfall during historical time, and expressed the opinion that there was a drying-up of the plateau regions of all the continents, compensated for by an increase of precipitation elsewhere. Evans insisted that the general question of the desiccation of the globe should be kept distinct from that of the drying-up of Central Asia, and pointed to recent changes in the physical geography of the latter region which rendered inevitable the desiccation of the country. The whole problem was thus opened up, with an evident consensus of opinion that some change, continuous or fluctuating, had taken place in the climate of Central Asia. At the end of a decade, during which the question of desiccation was warmly debated, Gregory presented an exhaustive review of the opinions embodied in the literature. From this it would appear that the cooperation of geologists and geographers had been able to reach no more definite result than that as an increased rainfall had been demonstrated for many parts of the world, there was a predisposition in favor of a compensating decrease in Central Asia, though the conflict of opinion on this point might be explained on the

hypothesis that the desert is widening in some places and contracting in others.

Now it must be evident that if the discussion of the relation of change of climate to migration is not to remain permanently (like its philological counterpart) on the basis of the advocacy of personal views, actual investigation of the archaeological evidence must be carried out upon the ground, for in this way only may direct proof be obtained. It is to the high credit of Raphael Pumpelly that he envisaged the problem in this way; and it is fortunate that grants from the Carnegie Institution made possible two expeditions to Turkestan, in 1903 and 1904, under his direction. It should be understood that these expeditions were organized, and the grants made, for the specific purpose of investigating the theory that the great civilizations of the East and West had their origins in Central Asia, and of examining the evidence for the supposed occurrence of changes of climate in the same region. The results arrived at in regard to these questions, therefore, were not by-products of some other undertaking, and are further guaranteed by the fact that the work was carried on by a selected group of specialists. (It may be noted that

Ellsworth Huntington, whose Pulse of Asia has enjoyed a wide popularity, was an assistant on the two expeditions.) In the present connection it is unnecessary to enter into detail in regard to Pumpelly's successes; what is of importance here is the fact that evidence was accumulated to show that, in Turkestan, organized town life, with agriculture and the breeding of animals, goes back for many thousands of years before the Christian era, and that after these investigations no doubt remains that the inhabitants of the sites explored had been repeatedly driven forth by destructive changes of climate.

Population, then, is limited, in any given habitat, by the means of subsistence; it remains stationary in normal stable conditions, but may increase without disturbing the equilibrium if the food supply be increased through improvements in the methods of production. On the other hand, the inhabitants of a given area will be forced out when, through the operation of natural agencies, such as a diminution of rainfall, the means of subsistence decrease, and from this compulsory movement ensue migrations. Clearly, therefore, it is unnecessary to assume that among certain groups population has been permitted to grow

without restraint, or to imagine some "mighty hive" from which nations have emerged in "swarms," or to suppose the existence of specifically "restless" peoples. It is of some interest to recollect, at this point, that any disturbance of conditions will manifest itself in an increase of population, and it can scarcely be doubted that migratory movements lead to the multiplication of population, instead of being the product of overpopulation in an established community. Finally, migrations are not to be attributed to a spirit of enterprise; peoples do not wander forth seeking for they know not what. We cannot assume in groups long fixed in habitat and ideas the sudden desire for booty, or freedom, or glory, or for "something unattainable." Nor may we accept the hypothesis that man is primarily a migratory, restless being, and that his fossilization ensues only when he is temporarily debarred from pursuing his natural impulses, and is brought to a standstill. Man is prone to remain where he is, to fixity in ideas and in ways of doing things, and only through nature's insistent driving has he been shaken out of his immobility and set wayfaring upon the open road.

5. So far, then, it has been shown that political

units have arisen at certain definitely circumscribed places. These places have not been consciously selected or decided upon by men, but have been determined by the conformation of the earth's surface, that is, by the localization of habitable areas and the possibilities of travel. The common element to be observed in all cases is that the places where political organizations have come into being have been points of pressure; they have not merely been lands upon which one group after another might have set covetous eyes, but have been the termini of routes which, of necessity, have been followed by successive migrant groups. The dependence of man upon his physical surroundings, thus exhibited, is made even clearer when it is observed that the human movements which lead eventually to the beginning of political organization have had their origin, not in man's foresight or planning, or as a result of the "automatic increase" of population, but in changes of climate within a definite

If, now, we accept this statement of the dependence of man upon his physical surroundings, it obviously becomes necessary to inquire how migrations have operated to bring political organi-

zations into existence. This inquiry will have the additional advantage of showing the uniform dependence of history upon a second set of natural factors, namely, the fundamental characteristics of man himself.

III

THE HUMAN FACTOR IN HISTORY

1. Political organization is a comparatively recent phenomenon which has made its appearance among men in certain restricted places at definite moments in time, and has spread but slowly from different points of origin. This fact has hitherto had little significance for the historian, for, owing to his preoccupation with the study of documents, he has been more interested in questioning the credibility of ancient narratives than in examining the antecedent conditions from which, in all cases, political units have sprung. When, however, the matter is explicitly brought up, it is evident that political organization is an exceptional thing, characteristic only of certain groups, and that all peoples whatsoever have once been or still are organized on a different basis. Furthermore, it is also evident that political organization has been but imperfectly extended over the population of the areas where it is dominant, and, consequently, that

"survivals" of the earlier régime are to be found even in the most highly developed countries. It will, therefore, be seen that the examination of the problem presented by the emergence of political organization is essential to an understanding of how man has come to be as he is, and that the uniformity of origin exhibited in this emergence is a further justification for maintaining the fundamental homogeneity of history.

If we compare "primitive" and "civilized" groups of men as we find them in the world today, almost the first point of difference that will strike the observer is that, among the former, the individual identifies himself by particularizing his blood-relationships, whereas, in the latter, the individual defines his status in terms of relation to a given territory. For example, "the Saxons brought with them across the Narrow Seas an organization according to families, hundreds, and tribes, dependent, that is to say, on blood-relationship. But the settlement of these units in the conquered land gave rise to the later parishes, hundreds, and counties. Gradually the idea of domicile replaced that of clan as the principle of social order, and whereas the family, or the hundred of families were formerly respon-

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sible for the malefactor, the modern police have power of arrest within clearly defined county or municipal areas. Thus, while in later history the physical features of the country are in some ways less coercive, administrative divisions have grown more precise, and have become more constant elements in the machinery of government."

This striking difference seems first to have been emphasized, in 1861, by Sir Henry Maine, and was dealt with, later, from the point of view of the anthropologist, by Lewis Henry Morgan.

Archaic law, Maine remarks, "is full, in all its provinces, of the clearest indications that society in primitive times was not what it is assumed to be at present, a collection of individuals. In fact, and in the view of the men who composed it, it was an aggregation of families." If, then, kinship in blood is the original basis of organization, there is no revolution known to us, he continues, "so startling and so complete as the change which is accomplished when some other principle—such as that, for instance, of local contiguity—established itself for the first time as the basis of common political action." "The idea that a number of persons should exercise political rights in common simply because they happened to live

within the same topographical limits was utterly strange and monstrous to primitive antiquity." "The most recent researches into the primitive history of society," he says in a later book, "point to the conclusion that the earliest tie which knitted men together in communities was consanguinity or kinship." "We have next to consider the epoch, reached at some time by all the portions of mankind destined to civilization, at which . . . the land begins to be the basis of society in place of kinship. The change is extremely gradual, and in some particulars it has not even now been fully accomplished, but it has been going on through the whole course of history. The constitution of the family through actual blood-relationship is of course an observable fact, but, for all groups of men larger than the family, the land on which they live tends to become the bond of union between them, at the expense of kinship, ever more and more vaguely conceived."

Morgan, after describing the earlier form of organization, goes on to say that the later form is "founded upon territory and upon property, and may be distinguished as a state (civitas). The township or ward, circumscribed by metes and

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bounds, with the property it contains, is the basis or unit of the latter, and political society is the result. Political society is organized upon territorial areas, and deals with property as well as with persons through territorial relations. . . . In ancient society this territorial plan was unknown. When it came it fixed the boundary line between ancient and modern society."

Now, while the forms and problems presented by the facts of kindred organization are represented in anthropology by an extensive literature, and while the forms and problems of political organization have been described and discussed by all the generations of historians and political theorists from Herodotus and Aristotle to the present day, I am unaware of any sustained effort that has been made to investigate the transition from the one to the other by comparison of all the available data. The question of the relations of the different types of kindred organization forms one of the major interests of anthropology; on the other hand, it is with the experience of men under the conditions of the new organization that History, in the accepted meaning of the term, deals, and it must be apparent now that the only satisfactory approach to the

study of History will lie through the investigation of the phenomena of transition wherever this may have taken place. But while the transition has not yet been made the subject of extended research, there is one fact at least which stands out with such distinctness that it may be utilized, at once to exhibit the homogeneity of history, and to reveal the source of the most notable characteristics of modern life.

2. To observe this fact in its proper setting, it is necessary to see that, while the distinction between kindred and political units may readily be defined, the description of the difference does not explain how the later condition sprang from the earlier. In other words, there is some step or process involved in the transition which neither Maine nor Morgan has brought to light.

To comprehend the situation fully, we may begin by saying that kindred organization, in whatever form it may assume, reflects the natural facts of human generation. What follows immediately from this is a commonplace of the study of primitive man which must be constantly borne in mind, for kindred organization implies the unquestioned and unremitting dominance of the group over the individual, and this leads to the

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tenacious and uncompromising maintenance of customary ways and ideas. It will thus be seen that the despotism of custom negatives the idea that kindred organization could have been given up voluntarily, or exchanged, after deliberation, for something invented or considered better. The change, as I have pointed out, has been forced upon men at certain geographical points, determined by the physical distribution of land and water, and by a series of exigencies which go back to specific changes in climate within a definite area of the earth's surface. Furthermore, the immediate occasion of the break-up of kindred groups has been the collision and conflict, at the termini of routes, which have ensued from the migrations of men; and apparently it has required repeated, long-sustained, and bitter conflict, such indeed as Gilbert Murray has depicted in The Rise of the Greek Epic, to overcome, even in a limited degree, the adherence of such groups to old customs, old ways of doing things, and old ideas. Wherever political organizations have come into existence these conflicts have taken place, so that there is a direct historical relation between war and this particular step in human advancement.

Now, there is a strong temptation to turn aside here, under the guidance, let us say, of Chadwick's Heroic Age, and dwell upon the story of these struggles, dimly conveyed to us through the alluring haze of epic poetry, but it is essential, in the present connection, to keep clearly before us what it is that, in these cases, war has destroyed. The cardinal point is that the conflict, in breaking up the older organization, liberated the individual man, if but for a moment, from the dominance of the group, its observances, its formulae, and its ideas. Briefly, a situation was created in which the old rites and ceremonies could not be performed, one in which the old rules of action were manifestly inadequate, and hence one in which the individual became, in some measure, a law unto himself. This, at bottom, is the fact upon which all history turns.

It is difficult for the modern man to realize that, in the earlier period, individuality did not exist; that the unit was not the single life, but the group; and that this was the embodiment of a relatively fixed system, from which escape was normally impossible. So completely was the individual subordinated to the community that art was just the repetition of tribal designs, literature

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the repetition of tribal songs, and religion the repetition of tribal rites. Conversely, the breakup which resulted from the ultimate conflict of alien groups had, as its most essential feature, the release of personal initiative, the creation of personal responsibility, and the recognition of personal worth and individuality. These appear in actual life under the form of individual selfassertion, which, in all later developments, remains a significant phenomenon. And here, parenthetically, it may be pointed out that we accept readily enough as characteristic of the transition epoch the spirit of boasting which pervades the literature of such periods, and we set down as the all-pervading motive of action the hunger to win personal glory, but when we come to the discussion of our own times we show no disposition to analyze the conventions that now define the avenues through which the same spirit may find outlet, nor do we seek to discover the means by which this spirit is kept in check under modern conditions, nor the relation that its expression bears to opportunity. Needless to say the question has never been taken up as to the delimitation of the channels through which self-assertion might properly realize itself in desirable activities.

We are now in a position to see that the release of individual self-assertion through the temporary overthrow of the domination of customary restraints has been the necessary prelude to the emergence of territorial organization and the institution of personal ownership. However far apart these two elements may appear to be in modern life, in the beginning they are identical, for the fundamental characteristic of political organization is the attitude of personal ownership assumed by the ruler towards the land and the population over which he has gained control-an attitude expressed to this day in the phrases "my army" and "my people." What we have uniformly at the beginning of the historical period in different lands is the assumption of sovereign ownership by an individual leader or king who relies upon the aid of a military group, caste, or aristocracy to hold in subjection a subordinate population of which little is heard; and later History is, primarily, the record of the unceasing efforts of kings to extend what they regard as their personal possessions. Even today, the most advanced political theory (of German origin, naturally) accepts the view that the state is an institution imposed by a victorious group

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upon those whom it has conquered, with the single object of regulating the authority of the victor over the vanquished, and guarding against internal rebellion and external assault. Rulership, in this view, has no further purpose than the economic exploitation of the conquered by the conquerors.

The crucial point to be observed here is that kingship and territorial organization represent simply the institutionalization of a situation which arose out of the opportunity for personal self-assertion created by the break-up of primitive organizations. And it should be understood that just as the relative stability of the older units follows from the fact that every human being is born into a given group and becomes assimilated to this in speech, manners, and ideas, so, in the new organization, the status quo operates to perpetuate itself, and the mere fact of its existence becomes an argument for regarding it as ordained by some super-mundane power. Thus, throughout the past, we are presented with the anomaly of men fighting to maintain the institutionalized vestiges of the self-assertion of aggressive individuals on occasions of long-past upheavals. On the other hand, it must also be observed that-

under conditions which it is of paramount importance for the historian to make clear—the spirit of self-assertion has arisen from time to time in the subordinate elements of composite groups. Indeed, what we ordinarily designate "constitutional history" is largely occupied with the efforts put forth by one or another element, class, or order included within a political group to contest the dominance of a ruling minority, and the theory of sovereign ownership. From this internal contest has arisen the theory of individual "rights" (of which perhaps the most fundamental is that of preventing other people from interfering with a man's use of his own property), and the theory that political authorities may be tested and reformed in accordance with current ideas. But, while these matters constitute the marrow of history, we must leave them here to concern ourselves more particularly with other, less generally recognized, results of the initial self-assertion.

3. The object we have in view is to discover, if possible, how man everywhere has come to be as he is. From what has been said it will appear that this involves a consideration of the facts of "transition" and "release," and a vivid realiza-

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tion that these phenomena have made their appearance only at certain geographical points and at certain moments of time. It has been shown already that political organizations have arisen at points definitely localized and determined by the physical features of the earth's surface, and it follows explicitly that the release of the individual from the dominance of the group, and the stimulus and opportunity necessary for the emergence of individual initiative and self-assertion have been similarly restricted. Hence we arrive at an aspect of the case which is of fundamental importance for an understanding of the present condition of mankind, namely, that individualization, and the politicization of groups has never been other than irregular and incomplete.

The origin of this irregularity is, simply, that pressure and conflict, coming at specific points, have never been evenly distributed geographically; and the break-up of kindred organization, never having been designed, has never been fully and deliberately carried out. Of necessity, some lands and some people, being nearer the immediate seat of conflict, have been more deeply involved in the struggle, and hence more completely exposed to the disturbing influences. Of

necessity, too, release, being ultimately personal, has opened different paths of opportunity to different members of the community.

The manifestations of the irregularity have been of the most varied character. Within the groups primarily affected, for example, the breakdown of the old organization has not been accompanied by the revelation of any "best possible" substitute, and so, in the stress of emergency, the old forms are made over to do service as best they may, new forms are called by old names, and new ideas masquerade in faded habiliments. Furthermore, when the turmoil begins to subside, the lately disturbed groups, as readily as their forefathers, turn to impose their newly acquired modes of thought and action upon the rising generations, and hence the arrangements of a given moment are perpetuated indefinitely.

Outside the original political group, again, the influences of the upheaval spread, as from a center, in ever widening and diminishing waves. To observe the results of this extension, it is necessary to make a distinction which, I think, has not hitherto been observed. If, avoiding the complexity of the situation presented in the countries ordinarily included in "ancient" his-

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tory, we turn our attention to China and India, it will be seen that a political organization comes into being in the midst of non-political communities. Typically, the new political unit may be regarded as maintaining contact with tribal or kindred organizations on two frontages, and the distinction to be made arises from differences in the activities which follow from the conditions in the two cases. It has already been pointed out that, in China and India, political units make their appearance just within the exposed frontier; the result of this is that the new organization has behind it, rearwards, an extensive country with a quiescent population grouped on the old lines, and, in front, outwards, similar groups, subject, however, to perennial uneasiness and disturbance. From this situation there arise two different types of activity on the part of the middle group—and it is not without significance that in other countries besides China there has been a recognized "middle kingdom."

If, then, we consider the relations of the political unit towards the "native" population in its rear (avoiding the error of identifying an assertion of territorial dominion with the politicization of a population), it will readily become ap-

parent that there is practically no case on record in which this population has been wholly incorporated into the political organization, or in which the kindred organization has been completely broken down. This condition is manifest in China and India, but the statement holds true equally of Great Britain, and is conspicuous in the New World. The occasion of this unequal politicization of geographically protected peoples may be traced to the aggression or selfassertion of small bodies of men, representing individuals who have not submitted themselves to the process of re-stabilization in the political organization. It has been usual to classify these men, somewhat invidiously, as "adventurers," but in reality they are individuals for whose awakened initiative and desire for purposive action the new arrangement provides no adequate opportunity. It is the case, everywhere and in all times, of "The man who would be king":-"we will go away to some other place where a man isn't crowded and can come to his own." So, in India, the Aryan settlement of the Punjab was followed by the rise of small Aryan kingdoms in the neighboring Ganges valley, and the footsteps of the adventurers may even be traced,

still farther south, in the Deccan. Precisely the same course of action is to be seen in China, and is exemplified, frequently, in later times, in the colonial expansion of European peoples.

Turning next to the policy of the "middle" kingdom in regard to the outward or frontier groups, a wholly different situation comes into view, for, in this case, the aggression or pressure is directed against the central political organization, and not exerted by it. What is here to be considered primarily is the means of defence adopted by the political unit against migrant invaders. In ancient times, it would seem that one of the earliest expedients for protecting the exposed frontier was the wall, and the barrier erected by the Chinese is but one instance of a practice which has been followed throughout Asia and Europe. On the other hand, it was discovered at a remote period, for example, by the Chinese under the Han dynasty, that a more effective defence of the land might be provided by a military occupation and control of the frontier territory lying beyond the actual boundary of the organized political unit; and thenceforward the Chinese government has followed the policy of maintaining its hold upon the prov-

inces of Mongolia and Sin Kiang. In this procedure we have an example of a strategic policy which has played a most significant part in the history of the world, and is even now a subject of debate in every "foreign office" on the globe. It is of interest to observe that the Romans should have relied, in general, upon the earlier expedient of the wall, with its accompaniment of a march or "no man's land" in front. But after the long series of barbarian invasions which brought about the disruption of the Western Empire, the newer political organizations which arose upon its foundations adopted the later Chinese policy and erected for defensive purposes, across Central Europe, that series of marken—frontier provinces under military control-from which have sprung the German and Austrian governments of the present day.

Clearly, then, the extent of the influence exerted by the "middle" kingdom, and its central political organization, will differ radically in each of these typical cases; and we may see, in brief, that the present condition of the great contrasting groups of East and West, of China and India on the one hand, and of Europe on the other, springs from the manner in which the results of localized

transitions from kindred to political organization have affected neighboring populations. In the case of interiorly situated groups, the more obvious institutions of the new régime are extended, through the forceful activity of individuals, without the earlier organization of the groups brought under subjection being greatly disturbed, or the individual members of these groups being influenced by any awakening. Thus the institution of kingship, with its accompanying theory of sovereign ownership, is imposed in new areas without an attendant break-up of kindred organization, and without a resultant stimulus to personal initiative. In the case of exteriorly situated peoples, the influence exerted is, on the other hand, altogether indirect. Beyond the wall, there is no extension of politicization. The frontier is a declaration of personal ownership, and with the internal condition of the exterior barbarians the king has no concern. But the barrier or pale, whether of masonry or of armed men, obviously exerts a pressure of its own; it acts effectively as a dam against which weight accumulates, and so creates a point of pressure for those outside. In the end, the barrier breaks, and with the inundation a new situation is created in

which new tribal units are broken up, new individuals awake to self-assertion, and a new redistribution of ownership takes place.

I have remarked earlier that "transition" has not been made the subject of extended comparative research, and all that has been done here is to suggest the fundamental importance of the study. Nevertheless, even a superficial inquiry brings to light certain points of great interest, and we see that transition is in all cases the result of pressure and conflict at geographical points which are absolutely determined by the configuration of the earth's surface, and that this localization of transition, in place and time, leads everywhere to irregularity and unevenness in the distribution of political institutions. Most significant of all, the central feature of transition is not merely the substitution of territory for bloodrelationship as the basis of unity in human groups, but the emergence of individuality and of personal self-assertion, and hence it follows that human advance rests ultimately upon the foundation of individual initiative and activity.

4. At an earlier point in this discussion it was found necessary, in order to escape from the

vagueness of such terms as "civilization," to restrict the inquiry, for the moment, to the beginnings of political organization. If, however, we are ever to understand how man has come to be as he is, the investigation cannot be limited in this manner; for while human life is, unquestionably, conditioned by the organization under which it is conducted, the actual content of life cannot be summed up or expressed in terms of organization. The differences which are to be observed between groups at the present moment, between earlier and later generations of the same group, between individuals, and between earlier and later periods in the life of the same individual, cannot be epitomized in any description of the forms of human association.

Here, for the sake of clearness, it may be pointed out that the practice of any art involves the acceptance of specific limitations and the recognition of conventional forms within which the artist's expression is confined. No student of sculpture or poetry, for example, will confuse the technique of a statue or a sonnet with the thought and emotion which it attempts to convey. In short, the work of art is something more than the technical rules by which it is conditioned. Now

the conduct of life is an art, and is limited by specific rules and conventions, but there appears to be a preponderant disposition on the part of students of man to regard the exterior rules and conventions, laws and social usages, as the essential matter for consideration. This is made clear when we observe that legislators, publicists, and "social workers" hold tenaciously to the opinion that the advancement of man is to be effected by the simple expedient of modifying the existing regulations. Whether this be true or not, there can be no question that in the investigation of the elements of human history we must set ourselves to inquire, not merely how the forms and conventions of human aggregates have reached their present status, but how the content of life has come to possess the infinite variety which it exhibits today.

In pursuit of this broader inquiry, we may begin by saying that what differentiates man from animal cannot be what he shares in common with his closest non-human relations, and hence that, in seeking to account for human advancement, the common possessions of animal and man must be eliminated from consideration. Fortunately, there is practical agreement among all

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classes of investigators, psychologists, logicians, and anthropologists, that the differentia of man consists in his possession of articulate speech or spoken language. Speech is a difference easily determinable, and has in itself proved to be a subject of profound interest to scholars, but the success that has attended the study of words and languages during the last century has somewhat obscured the important fact that speech does not exist in and for itself. The interest that has been taken in the changes of form, sound, and meaning of words has hindered, until quite recently, a just appreciation of the fact that the study of words cannot be separated from the study of what they designate. Speech comes into existence in response to the desire on the part of a human being to make himself understood by someone else, and is an instrument for the communication of ideas. Language is a conveying medium, and the aim of speech is the conveyance of ideas, not the mere interchange of words. Hence the humanist, or student of man, will interest himself not merely in the form of expression, but in what is expressed; he will pass from the individual words of a language to examine the ideas conveyed. Linguistic scholars have

rendered invaluable service in the composition of grammars and vocabularies, but they have, not infrequently, lost sight of the circumstance that any given language is the medium through which a particular system of ideas finds expression. While, then, we may accept speech as the distinguishing mark of humanity, we cannot but recognize that the fundamental object of inquiry will be the system of ideas represented in a given language at a given time.

If, then, we come to compare, not man and brute, but the differing groups that go to make up the human population of the globe, the distinguishing feature of any group will be, not its language, implements, or institutions, but its particular idea-system, of which these other manifestations of activity are varying expressions. Without exception, the products of human activity are expressions or aspects of the entire mental content of the group or individual. This mental content, moreover, is not to be conceived of as a mere assemblage of disparate units placed in juxtaposition, but as cohering in an idea-system. Ideas are not simply accumulated or heaped up; on the contrary, every "new" idea added not only modifies, but is in turn modified by the existing

system into which it is incorporated. Thus it appears that no idea-system, any more than an actual spoken language, is a deliberate construction. Languages are made up of words, but these are not consciously and systematically elaborated; like the names in a scientific classification they come into existence only as occasion demands, and are elicited by objects, actions, and events. Before "plowing," "sowing," and "reaping" could have been named these actions must have been performed and recognized. Similarly, the idea-system of a group is not to be attributed to foresight or planning, but to the pressure of circumstance. It will appear, then, that if we are to consider the content of life in addition to the exterior forms of human association, the study before us must concern itself with the factors and processes through which the idea-systems of different groups have come to be as we find them today.

In justification of thus postulating idea-systems as a basis for the comparative study of man, it may be pointed out that what we find in "civilization" is not the product of primary emotions, which man shares with animals, but of some activity which he has developed in a characteristic

manner. This activity may be described as the formation and expression of ideas. The physical and psychological constitution of man being "given"—a point to which reference will subsequently be made—what varies from group to group is not this foundation, but the results of mental activity; and we want to know how these results have come to exhibit the differences we find in the world today. Thus human "evolution" is, fundamentally, intellectual "evolution," and the diversity of status in human groups at the present time is to be traced to differences in mental activity. This basis of study will be found to meet all the requirements of the comparative method as exhibited in biological evolution, which is founded upon a comparison of the phylogenetic or historical series, the ontogenetic or biographical series, and the facts of present geographical distribution, and the investigation of how man has come to be as he is must be placed upon such a basis as will make the utilization of these categories possible. Furthermore, this basis has already been found necessary in different lines of humanistic inquiry. Human "advancement" is not measurable in terms of any one of the classes or categories under which human

activities have been grouped for purposes of study. When we consider any one subject like religion, art, language, or political organization, by itself, we simply impose a voluntary limitation upon our personal attention; in actual life, on the other hand, the mental activity of man has never been divided into separate compartments. Hence in dealing with these separate studies we require some more general basis of comparison. So Hobhouse, tracing the "evolution" of morals, takes as a foundation "the collective stock of knowledge, the equipment of method and governing conceptions which constitute the working intellectual capital of any community." Similarly, S. A. Cook points out that "for the study of religion it is necessary to observe the tendency of man to blend into one whole his tested and untested knowledge, his own experience and that of others." "A 'body' or system of beliefs, practices, and the like, depends upon people; it is part of their larger total 'body' of thought, and undergoes development." "The development of a man's life and that of his total world of thought are interconnected; and since his profoundest and most valued beliefs are not unchangeable, the most vital part of his physical being and that of

his world of thought are both capable of development. Each depends upon the other, and the whole evolves."

All the more, therefore, when we come to take up the broad problem of how man has come to be as he is will it be necessary to adopt the canon that judgment in regard to the mental activity of a given group can be based only upon the totality of the various mental phases of culture—language, custom, myth, and art. And this position is fortified by McDougall's opinion that "man, since he became man, has progressed in the main by means of the increase in volume and improvement in quality of the sum of knowledge, belief, and custom, which constitutes the tradition of any society. It is to the superiority of the moral and intellectual tradition of his society that the superiority of civilized man over existing savages and over his savage forefathers is chiefly, if not wholly, due."

As a result of these considerations, we arrive at the view that the study of how existing ideasystems have come to be what they are provides a feasible basis for an investigation of the advancement of man. The alternative bases of study which ordinarily are adopted concern them-

selves, on the one hand, with the physical constitution of human beings, and, on the other, with the exterior forms of human association. The first of these leads at once to the theory that there have been and are innately superior races, innately superior classes, and innately superior individuals, and that human advancement has followed from the spontaneous activity of these higher elements. As, however, no effort has been made to account for the sporadic emergence of these exceptions to the general rule of backwardness and stagnation, in the long run the argument is just an assertion of the physical superiority of those who have become conspicuous. The second basis of study fixes attention upon the forms of group organization, and provides no opening to a broader consideration of the content of human life; whereas the basis here proposed brings under one view the entire range of activities represented in religion, art, literature, philosophy, science, and co-ordinates these activities with the facts of history and of group organization.

5. If we turn to examine the relation of ideasystems to group organization, a remarkable parallelism in development becomes apparent. It has already been pointed out that under primi-

tive conditions organization is relatively stable, and that the individual is bound by the authority of the group. The idea-systems of primitive groups are highly restricted in content, but, in addition to this limitation, the traditional ideas entertained have, in general, been transmuted into customary actions and ways of doing things. So, religious ideas are concentrated in rites and observances, and explanations of natural phenomena are embodied in symbolic ceremonies. In short, the whole body of custom and tradition represents ideas fixed in action. Since these modes of action, which are associated with all the essential activities of life, must be prosecuted with rigid adherence to precedent, it is evident that any reconsideration of the validity of the ideas upon which they rest is practically out of the question. Primitive man does not "think," he performs definitely prescribed actions under the eye of the community, which, in turn, is vitally concerned in the exactness with which the repetition of formula or ceremony is carried out. It will thus be observed, as Professor Shotwell suggests, that a study of the relation of custom and observance to idea-systems, and of the conditions under which they become "survivals" when the

latter have changed, must ultimately constitute an essential feature of this inquiry, but as yet such study has not been undertaken.

It has been indicated that the breakdown of kindred organization, following upon migration and collision, tended to release the individual from the domination of the group, and to create a situation in which personal initiative and selfassertion became possible. It has now to be pointed out that, while this release may be regarded as affecting primarily the submission of the individual to the mandatory authority of the group, essentially it opens for the individual the possibility of thinking for himself without reference to group precedent. The emergence of individuality, with its accompanying manifestations of personal initiative and self-assertion, is intimately associated with the beginnings of independent mental activity, of thinking which may lead the individual to question the validity of inherited group ideas.

This striking result, it must be understood, is not achieved by the individual of his own volition or accord; it is thrust upon him by the force of circumstances. To make the point clear, we may say, speculatively, that had there ever been

but one system of ideas common to all men, advancement would have been impossible, for progress in ideas springs from comparison, and a sense of difference could not arise from contemplation of different instances of the same thing. Conversely, the critical spirit is easily enough aroused by the juxtaposition of different means for attaining the same end; so that different observances for effecting the same result, different mythological explanations of the same phenomena, when brought into contact, may be expected to lead to questionings and comparisons.

That some such path has actually been followed in the past seems clear. Ernst Curtius pointed out, long ago, that the influence of sea-navigation upon the development of the Greeks had been very marked, as it suddenly brought face to face men who had been living under widely different conditions, and hence induced an endless comparing, learning, and teaching. A more drastic form of the same process is exhibited, however, when successive migrating groups invade the land, be it ancient Greece or medieval Italy, and a time ensues of "constant war-paths and uprootings of peoples." In such circumstances, the whole traditional body of customs, rites, and

observances tends to be overthrown, for the turmoil no longer permits of opportunity to propitiate the slain, or to maintain the sacrifices for the dead; the lines of kindred are broken, and new groups, composed of men whom chance has thrown together, are formed under the leadership of some individual whose self-assertion, backed by strength or craft, seems to offer protection. This is the essence of all "Dark Ages," in which, through swiftly moving change, contrasts are made vividly apparent, men awake to the perception of differences in ideas, and criticism is born.

At the present time the view is very widely entertained that human advancement is the outcome of the commingling of ideas through the contact of different groups. Thus Henry Balfour says, typically, "This process of grafting one idea upon another, or, as we may call it, the hybridization of ideas and experience, is a factor in the advancement of culture whose influence cannot be overestimated. It is, in fact, the main secret of progress." So, too, F. W. Maitland holds that "the rapidly progressive groups have been just those which have not worked out their own salvation, but have appropriated alien ideas."

While, in the main, accepting these statements, it must, nevertheless, be insisted that the great advances of mankind have been due, not to the mere aggregation, assemblage, or acquisition of disparate ideas, but to the emergence of a certain type of mental activity which is set up by the opposition of different idea-systems. This is illustrated in Jastrow's remark that civilization is everywhere the result of the stimulus evoked by the friction of one group upon another. The stimulus is mental, and the friction springs from the contact of differing customs and explanations. The simple commingling of ideas undoubtedly takes place, but the important point is that different ideas in regard to the same subject, when maintained in opposition by members of the same group, necessarily evoke comparison and critical discussion. The outcome of this is not always, nor even generally, a choice between two alternatives, for the debate will leave neither of the original positions wholly unchanged, and hence a new idea-system will arise which is not a selection of materials drawn from various sources, but a resultant of the juxtaposition of different bodies of thought.

We may see, then, that, under primitive condi-

tions, the type of organization operates to maintain a fixity of relations, customs, and ideas; under transitional conditions, however, the dominant factor is the release of the individual, manifesting itself in the self-assertion which gives to the new organization its characteristic form, and in the personal criticism through which the older idea-systems are modified and changed.

6. If, as would thus appear, differences in ideasystems have been of crucial importance in the history of mankind, the question as to how these differences have arisen will naturally force itself upon our consideration.

Differences in idea-systems are, fundamentally, man's response to differences in his surroundings. This fact has been obscured, in general estimation, by the somewhat exaggerated use which has been made of it by men like Buckle and Spencer, who, for example, have attributed the growth of superstition to the terror inspired by the threatening aspects of nature in tropical countries. If, however, we keep to a less speculative level, it will readily be admitted that the surroundings in which their respective lives are passed will present very different objects for consideration to the Eskimo and to the Arab; and so, while

the language of the one has many different words for "seal," that of the other displays a similar elaboration of terms for the "camel." This form of dependence of the group upon its habitat is so far recognized as unequivocal and precise that it has been made the basis of extended philological research with the object of determining the earliest seat of various peoples, notably the "Aryans"; for where the names of natural objects, such as trees and animals, have been borrowed from other languages it is assumed that these could not have been known to the particular group in its original home. It is true that objections have been urged to this course of reasoning, but the fact remains that, where the conditions of life lead men to pursue the occupation of fishing, the foreground of their interest will be dominated by terms and ideas which would be entirely different if the same individuals were engaged in cattle-raising or farming. In short, the surroundings in which a group is placed determine its primary interests, and these, as Boas has pointed out, affect the entire character of its vocabulary and the make-up of its system of ideas.

This fact is illustrated, for example, in Jas-

trow's study of Sumerian and Babylonian ideas of beginnings, "which may be summed up," he says, "in the statement that in the early Sumerian view the chief factor in the Creation myth is the bringing about of vegetation and fertility, whereas in the later Babylonian or Akkadian tale the main stress is laid upon the substitution of law and order for primitive chaos and lawlessness." Again, it is difficult to refrain from calling attention, in however condensed a form, to the examination of "The Background of Greek Science" by J. L. Myres, in which he endeavors "to recover some of the limiting conditions under which any scheme of scientific knowledge and scientific method necessarily came into being in Greek lands."

Considered as a theatre, a place for observing nature, he says, Greek lands offer in some respects unequalled facilities. They are a region of abrupt contrasts, and frank revelations of what nature is, in its infinitely various detail. Its clear air decimates distances—witness Lucretius' remark that far-off lights do not grow smaller; but its strong contrasts of hot and cold, due to intensity of sunlight and rapidity of radiation, continually present the atmosphere as a perceptible

fluid, with shimmering ripples over each roasted rock, and with an upper surface, emphatic as a sea-level, on which the wool-pack clouds sit like snowflakes on a window pane. In such a climate, too, 'wet' and 'dry' are as clearly defined in their antagonism as 'hot' and 'cold'; for wet and dry are not only natural opposites, but are engaged in perpetual struggle here, in alternating seasons of rain and rainlessness. With the other great antitheses of the physical philosophy, light and darkness, hard and soft, sweet and bitter, it is the same; but most striking of all, perhaps, is the extraordinary rapidity both of decomposition and of organic growth. All these, Myres continues, "challenge curiosity about the origin and the nature of life, with peculiar insistence, and apparent facility of experiment. Who, then, or what, maintains the world? This, for men, as for Olympians, if Olympians thought about such things, was the supreme question to be asked of nature. It was a question of minor interest, and merely historical value, 'Who made the world?' and 'What shall it be in the end thereof?' This indifference to cosmogony and eschatology is characteristic of Greek physical speculation, and greatly lightened its task. It stands in the strong-

est contrast to the Oriental, and particularly the Babylonian, insistence on origins, and interest in creation myths; and enhances the Greek insistence on questions about the structure, the maintenance, and the current behavior of the world; questions which Oriental, and particularly Babylonian thought, neglects, or glozes over."

Fundamentally, then, differences in idea-systems are determined by differences in man's physical surroundings, and these differences are maintained through the discipline exercised by the group over the individual. When, however, we come to examine the factors in human advancement, it appears that radical changes in idea-systems follow upon the collision of groups from dissimilar habitats. So, it was not, as has been thought, because he rode a horse that the nomad from Central Asia influenced greatly the lives of the dwellers in the outer circle of Eurasian lands, but because the conditions of his life developed a system of ideas which was wholly different from theirs. And here it is of the highest importance to observe, with Hogarth, that the relatively small and well-marked area of the Ancient East, in which the earliest marked ad-

vancement of mankind appears to have taken place, contains within itself no less than six divisions characterized by large differences of a geographical nature. These are Asia Minor, Armenia, Syria, Arabia, Mesopotamia, and western Iran, and I am unable, at the moment, to recall any area similarly restricted in which so many distinct types of habitat are placed in close association. Neither lapse of time, nor uniformity of government has been able to overcome the striking differences which the variations in habitat have promoted in the idea-systems of the inhabitants of these regions. As has already been indicated, the lower valley of the Euphrates and Tigris represents the natural focal point of human movement in these lands, the terminal of many routes of travel, and we may now see that while this central position implies a maximum exposure to attack, it implies also a maximum exposure to different systems of ideas.

Finally, in confirmation of the hypothesis that the changes which have contributed to human advancement have ensued from the collision of groups from widely different habitats, and hence of different idea-systems, we may point to the

initial stages of those great outbursts of intellectual activity which have distinguished every people which has risen above the level of primitive man. So, the historian of China is forced to repeat, from chapter to chapter, the formula: "first the successful invasion, the destruction of the old power, and then the formation of new nations, governments, and types of men"; and the summary of results in each case is typified in the statement that "not the least of the Mongols' gifts to China was the stimulus and fertilization of the native intellect in the domain of the imagination." Similarly, Vincent Smith, the latest historian of India, remarks that "the rule of the able and long-lived monarchs of the Gupta dynasty coincided with an extraordinary outburst of intellectual activity of all kinds. The personal patronage of the kings no doubt has some effect, but deeper causes must have been at work to produce such results. Experience proves that the contact or collision of diverse modes of civilization is the most potent stimulus to intellectual and artistic progress, and, in my opinion, the eminent achievements of the Gupta period are mainly due to such contact with foreign civilizations, both on the east and on the

west." Again, the entire history of Babylonia and Assyria is an epitome of such situations, and this leads a recent historian to observe: "it may be put down as an axiom that nowhere does a high form of culture arise without the commingling of diverse ethnic elements." "The Euphrates valley from the time that it looms up on the historical horizon," he continues, "is the seat of a mixed population. Egyptian culture is the outcome of the mixture of Semitic with Hamitic elements. Civilization begins in Greece with the movements of Asiatic peoples, partly at least non-Aryan, across the Aegean sea. In Rome we find the old Aryan stock mixed with a strange element, known as Etruscan. In modern times, France, Germany, and England furnish illustrations of the process of the commingling of diverse ethnic elements leading to advanced forms of civilization." Ultimately, attention may be called to Petrie's conclusion in his memorable study of The Revolutions of Civilisation that "every civilization of a settled population tends to incessant decay from its maximum condition; and this decay continues until it is too weak to initiate anything, when a fresh race comes in, and utilizes the old stock to graft on, both in

blood and culture. As soon as the mixture is well started, it rapidly grows on the old soil, and produces a new wave of civilization. There is no new generation without a mixture of blood, parthenogenesis is unknown in the birth of nations."

7. At this point, it is necessary to revert for a moment to a theory which has gained wide acceptance in modern times, namely, that human advancement has been the direct result of war. Thus Brinton, himself a veteran of the Civil War, urges that "in spite of the countless miseries which follow in its train, war has probably been the highest stimulus to racial progress. It is the most potent excitant known of all the faculties. The intense instinct of self-preservation will prompt to an intellectual energy which nothing else can awake. The grandest works of imagination, the immortal outbursts of the poets, from Homer to Whitman, have been under the stimulus of the war-cry ringing in their ears." It will not be necessary to epitomize the views to which this idea has given rise, or to indicate the variety of the arguments which have been adduced in its support. From all that has here been said, it is obvious that war has played a most significant part in the advancement of mankind, but the

benefits it has conferred have been confined to the break-up of crystallized systems of organization and of thought. Since man has not become sufficiently self-conscious of the natural processes which dominate his life, he continues to submit to the fixative influences of group discipline, and throws all his weight in favor of maintaining the status quo. It follows that, in the past, the gateway of human advance has been the violent conflict of the representatives of old and new ways of thought and action, whether the old and new be embodied, for the occasion, in states, in groups within a given state, or in single individuals. It must, therefore, be regarded as a shortsighted view which imagines the conflict thus precipitated as in itself a desirable thing, though, heretofore, man's ignorance of himself has made such conflicts inevitable. On the other hand, this opinion emphasizes, as perhaps nothing else could at the present moment, the supreme importance of an understanding of the elements of history. To reach this desideratum it has been necessary, first of all, to show that the history of man is homogeneous throughout, and to point out the factors which exercise a determinant influence upon the course of events; but to gain a knowl-

edge which may be of direct service in the consideration of human affairs we must now turn our attention, more specifically, to the processes through the operation of which man everywhere has come to be as he is.

IV

METHOD AND RESULTS

1. The task of science in the presence of a history, be it the history of the physical universe, of the earth, of the forms of life upon the earth, or of man, is the discovery of the processes through which things-stars, strata, and species-have come to be as they are, and each of the major sciences, such as Astronomy, Geology, and Biology, has entered upon the modern phase of its activities with the recognition of this fundamental problem. Commonly, this new departure is associated in men's minds with the acceptance of the idea of "evolution," which, in its most general form, implies simply that things have come to be as they are through a sequence of changes undergone in the past. As a consequence, it has been affirmed that "evolution" is just the projection of the idea of human history upon the world of nature; but the restricted sense in which this notion is true is that men have come to observe the phenomena of nature in a time relation

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or perspective. If, on this account, the student of organic nature may be said to have applied the idea of human history to his own subject-matter, he has in no sense adopted the historian's method. He does not attempt to write a narrative of what has happened in the past. In fact, it is not open to him to present his results in chronological form, since the biological record is entirely lacking in specific dates for happenings. From this deficiency most important consequences have ensued, for, on the one hand, the evolutionist has been forced to devote himself to the investigation of the processes of history, while, on the other, in presence of an undated record he has assumed an eventless world.

The outcome of this situation is apparent in the series of assumptions upon which Darwin based his work. In a thoroughly scientific spirit he set himself to discover the process or processes manifested in the emergence of new species. Nevertheless, accepting the authority of Sir Charles Lyell, he began by assuming that "Time is to Nature endless and as nothing," and from this proceeded to his second assumption that new species have arisen only through the slow cumulation of infinitely slight modifications. Further-

more, he took over from Lyell the methodological theory that we must interpret the past history of the earth and its inhabitants by the present, that we must seek for an explanation of what has happened by the study of what is happening, on the assumption that the processes manifested have never been different in kind or degree from what they are now. Lastly, he believed that there had been but one process involved in the origin of all species, that of "natural selection."

What Darwin attempted was to describe, as simply and directly as possible, the mode by which, in one particular field of nature, interactions result in something new. The character of his theory is immediately traceable to the absence of specific dates in the historical materials upon which he was forced to rely; had dated evidence been available, his conception of unmarked time, of time as an unbroken flow, could not have arisen. It follows that, having dated events to work from, the historian of man, when he comes to investigate processes, will adopt a procedure widely different from that followed by Darwin and his contemporaries. Instead of confining his attention to the present, utilizing the facts of the past for purposes of verification only, he will

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begin by examining the evidence for the actual changes that have taken place. Hence the procedure which is bound up with the conception that the present is the key to the past will, if one might so say, be reversed, and "History" will remain the study of the past with a view to the elucidation of the processes manifested in the present.

2. The scientific student of human history cannot accept Darwin's assumptions and procedure as a model upon which to pattern his inquiry, but he is not therefore left without guidance. An alternative method for approaching the investigation of how things have come to be as they are was suggested by Huxley. The great exponent of Darwinism pointed out that any hypothesis of progressive modification must take into consideration the fact of persistence without progression through indefinite periods, and, furthermore, urged upon Darwin's attention the possibility of occasional "rapid leaps" or changes in nature. In short, Huxley recognized three different sets of processes as contributory to the emergence of the present status: first, those represented in fixity, stability, or persistence; second, those manifested in slow continuous modifica-

tions; and, third, those revealed in explicit changes or events.

In later discussion the elements unrecognized by Darwin have more and more forced themselves into the foreground of debate, and have colored the views held by all investigators. Thus De Vries supposed that after periods of relative fixity, during which they are subject only to fluctuating variations, living beings may pass through shorter periods when their forms are abruptly modified in different directions by discontinuous changes. So, too, George Darwin expressed the opinion that the study of stability and instability furnishes the problems which the physicist and biologist alike attempt to solve, and he envisaged the course of "evolution," not as uniform and slow, but as divided between a sequence of slight continuous modifications accumulating through a long period, and somewhat sudden transformations which would appear as historical events. Again, his brother, Francis Darwin, regarded "evolution," not as a process of modification, but as a process of drilling organisms into habits, and thought of an organism as a machine in which energy can be set free by some kind of releasing mechanism. This latter idea,

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as will appear later, has been carried further by William Bateson, who also believes that variation occurs as a definite event, and that we can see no changes in progress around us in the contemporary world which can be imagined likely to culminate in the evolution of forms distinct in the larger sense. Finally, not to multiply instances unnecessarily, the essential feature of what I have called the alternative mode of approach is brought out by Hans Gadow in asking why it is that mammalian material can produce what is denied to the lower classes. Why have they not all by this time reached the same grade of perfection? "Because," he says, "every new group is less hampered by tradition, much of which must be discarded by the new departure, and some of its energy is set free to follow up this new course, straight, with ever-growing results, until in its turn this becomes an old rut out of which a new jolt leads once more into fresh fields."

In the study of man, the contemporaries of Darwin maintained a tradition of evolutionary inquiry which investigators like Tylor and M'Lennan regarded as completely independent of biology. This, indeed, is evident when we find that

Tylor considered the essential points for inquiry to be "permanence, modification, and survival." Maine had before this insisted that the stable part of our mental, moral, and physical constitution is the largest part of it, and offers a resistance to change that is rarely overcome. Clifford. while imbued with the newer biological conceptions of his time, instituted a contrast between positive and negative conditions of development: "a race," he says, "in proportion as it is plastic and capable of change, may be regarded as young and vigorous, while a race which is fixed, persistent in form, unable to change, is as surely effete, worn out, in peril of extinction." Bagehot, again, who wrote his Physics and Politics to illustrate the application of the principles of "natural selection" and "inheritance" to political society, recurs throughout his book to the influences which have made nations "stationary." He sees in revolutions the outbreak of passions long repressed by fixed custom, but starting into life as soon as that repression had been catastrophically removed. Furthermore, he sets a question which must be regarded as fundamental: "If fixity is an invariable ingredient in

early civilizations, how then did any civilization become unfixed?"

It is, however, in the study of the history of language that this alternative method has been most clearly defined. So Whitney, whose Life and Growth of Language may be regarded as the classic presentation of this subject in English, utilizes explicitly the three types of processes mentioned above. Thus, while, as is usual in the writings of philologists, he devotes the greater part of his book to a description of the processes through which language has been slowly and continuously modified in transmission from generation to generation, he calls attention to the operation of processes which tend to maintain every spoken dialect the same from age to age, and points, as in a third category, to the fact that occasionally whole communities have been led to adopt the speech of another people as a result of some great revolution. Indeed, it may be said that, so far as method is concerned, the historical study of language is one of the few subjects in the whole range of evolutionary inquiry that has been placed upon a satisfactory basis.

Here it may be observed, by way of addendum, how frequently the idea has been expressed, as

by Bagehot and L. H. Morgan, that portions of the human race have been halted at certain stages of progress, Henry Balfour, for example, is of opinion that the heterogeneity of groups may readily be explained by assuming that while the progress of some races has received relatively little check, the culture development of others has been retarded to a greater or less extent. Hocart, again, attributes "stagnation" to the failure of some factor or factors (described by him as "constant in their operation") which make for continuous progression. This point of view, however, embodies the assumption that "progress" is to be anticipated, an opinion which Maine was at pains to controvert, and which is in no way justified by the evidence. "Progress" is exceptional; hence our first concern must be with the processes, which are universal in their operation, that make for fixity and stagnation. Having determined what these processes are, it will then be possible to observe the influences of other processes through which modification and change are brought about.

3. Before proceeding further, there is, however, a point of some importance which must be dealt with parenthetically. Expressed in the simplest

terms, this may be stated in the question: What are the limits of humanistic inquiry? The query must be faced, for humanists in all branches of the study of man seem to feel it necessary to base their discussions upon what they conceive to be the conclusions of modern biology. In this way the unavoidable difficulties of the study of man have been needlessly complicated, and the student involves himself in debates over highly technical matters with which he is not competent to deal. Every science involves, as a fundamental condition of its pursuit, the conscious restriction of attention to a particular set of facts, and the success of any scientific undertaking turns upon the consistency and definiteness with which this initial restriction is observed. For scientific purposes, every investigation must be confined within definite limits; no science pretends to deal with the whole complex of natural phenomena, and in the study of man there are obvious reasons why the field of inquiry should be limited wherever possible.

The problem before us is to find out how man has come to be as he is everywhere throughout the world today. The fundamental restriction upon the limits of the inquiry is that the hu-

manist will accept man "as given," and leave all questions as to his origin and physical differences to the biologist.

While, at first sight, this may appear a radical departure, there is ample justification for the step, over and above the fact that neither the biologist nor the humanist is in a position to deal successfully with the entire field. There is, in short, an important body of evidence which indicates the "psychic unity of mankind." A typical example may be found in the remarks of Stefánsson on the Eskimo: "Commonly," he says, "primitive people are supposed to have certain mental qualities, designated as instinctive, through which they vastly excel us along certain lines; and to make up for this excellence they are supposed to be far our inferiors in certain other mental characteristics. My own observations incline me to believe that there are no points in which they, as a race, are any more inferior to us than might be expected from the environment under which they have grown up from childhood; and neither have they any points of superiority over the white man, except those which are developed directly by the environment. Of course an Eskimo can find his way about in the

wilderness better than the city dweller or the sailor, but he is likely to fall behind the white man of experience in just about the proportion you would expect, from knowing the greater advantage of training in logical thinking which the white man has had." Similarly, writing of the Sea Dyaks of Borneo, Gomes says: "Allowing for differences in environment, and consequent difference of similes, the idea expressed in many Dyak proverbs is precisely similar to that of some well known among the English." "The radical fundamental thoughts and passions of mankind all over the world, in every age, are much the same."

Judgments such as these may be found in the reports of observers in every part of the world, and the general view expressed is widely accepted by anthropologists. It is entirely possible that the obvious physical differences between men may be accompanied by corresponding psychical differences, but even admitting that there are congenital differences in "races," and that the influences of these differences may ultimately become an important study, in our present state of ignorance these differences are negligible quantities, and man may be treated as an un-

changing quantity. The opinion of anthropologists coincides, in general, with that of psychologists like McDougall, who thinks that the primary innate tendencies, which are the essential springs of motive powers of all thought and action, are common to men of every race and of every age. So investigators widely separated in their immediate interests reach the same conclusion, namely, that we have every reason to think that the mind of the savage and the mind of the civilized are fundamentally alike. "There can be no doubt," Boas states, "that in the main the mental characteristics of man are the same all over the world." "The working of the human mind," Gomme believes, "is on the same plane wherever and whenever it operates or has operated.?

It must be admitted, however, that even this unanimity does not remove all possibility of question or debate, and therefore it is that we accept Morgan's axiom of "the specific identity of the brain of all the races of mankind," and Temple's "law of the constancy of human reasoning," not as self-evident or demonstrated truths, but as methodological assumptions set up for the purposes of a particular investigation.

We delimit our field by taking man "as given," by assuming that all human groups have started from the same level, that in every case the same capacity for "advancement" has been present, that man is, and has been, very much the same all the world over.

4. Turning, then, to consider the processes manifested in fixity or stagnation, we may observe that the mental activity of any individual is conditioned at every step by the idea-system of which he stands possessed. Now, at bottom, this conditioning body of ideas is not a product of the individual's own activity, but is imparted to him by the group into which he is born, and in which he is brought up. Every individual comes into existence in association with some group, and is subjected from the commencement of his career to a discipline or drilling in the modes of thinking, feeling, and acting of the group. Thus at the foundation of his life there lies a great body of conclusions, motives, and customs for which he is in no manner responsible, but in accordance with which his behavior is unconsciously regulated. "He accepts from the group," as Brinton says, "the ideas, conclusions, and opinions common to it, and the motives of

volition, such as customs and rules of conduct, which it collectively sanctions."

This normal condition of dependence is most easily discernible in the case of primitive man, for the lower we descend in the scale of civilization the more strictly, to all appearance, is the individual controlled by the group of which he forms a part. Indeed, the savage is completely hedged about by conventions, at once minute and obligatory, the violation of which is attended by drastic penalties. Hence, as McDougall remarks, "in primitive societies the precision of the customary code and the exact coincidence of public opinion with the code, allow no occasion for deliberation upon conduct, no scope for individual judgment and choice." "We see the same result among all savage communities still existing on the earth, and among all peoples of whom we have any record at the dawn of civilization. Their actions, whether individual or collective, are hampered, controlled, or enforced at every step by custom." It is, unquestionably, due to this rigid enforcement of custom that the lower groups have remained for long periods of time in a fixed or stationary condition, that their man-

ners, customs, and modes of life have continued almost unaltered for generations.

While, however, the discipline of the individual by the group may be more immediately apparent in groups less advanced than our own, the same process is visibly operative in modern life. For, indeed, what we mean by "civilization" and "culture" is neither more nor less than the store of ideas, beliefs, conventional opinions, and tastes which is transmitted from each generation to the next, and into which each member of the community is inducted by his elders. And while the modern teacher, but recently become selfconscious of his function, has much to say of the responsibility of the community for the "education" of the child, there has been, as Cook remarks, a pretty successful education of the race from the days of primitive prehistoric man. It is but formulating the practice of the ages to say that the resources of government and law, religion and morality, must be enlisted to constrain the individual in order to procure a common likeness in impulses, habits, and ideas within the group.

It follows from this unsought initiation into the idea-system of his ancestors that, even in the most

backward group, the individual enters upon life at a relatively high stage of human advancement: he stands upon a platform which has been laboriously constructed by his unremembered predecessors. At the same time, it must be recognized that, even in the most advanced groups, this initiation imposes severe limitations. At best, the platform is narrow; and the individual acquires habits of thought and a fixity of ideas which render him unduly tenacious of what has been inculcated in him, and unduly suspicious and obstinate in presence of what may appear to him to be different or new. While, then, the educative discipline tends to preserve what has been acquired, it presents a very real obstacle to further advance. In face of this consideration, the theory commonly expressed, that "the inheritance of the permanent achievements of one generation by the next is the main factor of progress," that, in fact, human advancement has been due to the maintenance of tradition, to the drilling through which the individual has been put in possession of the acquisitions of the group, will be seen to express but a partial truth, for if this process had been the only one in operation advancement would, manifestly, have been impossible. What, how-

ever, we have in this process of group discipline is the fundamental element to be considered in any attempt to show how man everywhere has come to be as he is today. This it is that produces that condition of sameness, stagnation, fixity, and persistence which has been dwelt upon by all who have had occasion to speak of backward peoples, lower classes, and illiterate individuals. The operation of this process tends to the maintenance of the idea-system of the group or individual as it exists at any given moment, and the study of man involves, as its next step, an inquiry as to how modifications and changes in idea-systems have been, and still are, brought about.

5. Under actual conditions this fixity of ideas is never complete, and in all human groups there may be observed in operation certain processes through which idea-systems are being slowly but continuously modified.

The processes of modification are of various types and these are of varying degrees of influence. In the first place, we may readily see that while the initial discipline of any two individuals may proceed along the same lines, and while their lives may be led in the same surroundings, their experiences in life will never be identical,

and in maturity their responses to any given excitation will not be exactly the same. The difference of response will be all the greater if the lives of the two men have been passed in different circumstances. Again, while every member of a primitive group is drilled in its traditional observances and customs, the performance of these obligatory acts cannot be identically transmitted from generation to generation; unconsciously and unobserved, modifications will creep in. This is true even in respect to verbal formulae, the value of which is believed to reside in their exact repetition, for here, in addition to the possible treacheries of memory, the reproduction will be affected by the unceasing modifications in the use of words. Language, indeed, provides in itself a perfect illustration of the fact that use entails wear, and it is in language that the processes of modification have been most carefully observed.

Furthermore, while it is taken for granted that men are very much the same all the world over, this is not to be taken to mean that all men are identical. They are the same on the average, which implies that with reference to any given characteristic or faculty a certain percentage of

the individuals in a group will be above and below the mean. It follows, for example, that in any group there will be some individuals of greater personal initiative than the majority of their fellows. These undoubtedly will have an influence, but what is frequently overlooked is that the mental equipment, the idea-system, of such individuals, however gifted they may be, is strictly that of the group to which they belong. For more than one reason, indeed, no "genius" can make any great departure from the ideasystem of his people; the individual may influence the group, but such modifications as he may succeed in introducing will proceed along established lines, and so cannot be regarded as significant "changes."

It is evident, then, that the idea-systems of all groups are subject to slow continuous modification through the operation of processes which may be described as internal or self-contained. They are also modified in varying degrees by "the contact of peoples." This term has acquired a special significance in recent years as identified with the hypothesis—based upon the ethnographical study of the distribution of culture objects, designs, and practices—that the present

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status of any group is to be explained in terms of the transmission of culture elements from one group to another. It may at once be said that this hypothesis describes a process, practically universal in its application, which has been of the greatest importance in the gradual modification of idea-systems, but one, on the other hand, which cannot be accepted as providing an explanation of the phenomenon of "advance."

To make this distinction clear, it is necessary to consider that the process of modification by exterior contact has many phases. A simple form may be instanced in the interchange of objects between contiguous groups, and by this means culture objects may be dispersed over great distances by a series of border exchanges, without the coincident transportation of individuals. An extension of this phase comes when the objects or practices are carried from one group to another by traders, missionaries, or other travellers; and one has but to consider the spread of the megalithic monuments to recognize the antiquity of this mode of influence. Another stage is reached when traders, like the Cretans, Phoenicians, and Greeks, establish themselves among alien peoples; and the furthest step on these lines

is taken when backward groups are brought under subjection by others of superior culture. as when the inhabitants of Iberia and Gaul were conquered by the Romans, or those of Mexico and Peru by Spain. Now, without question, an influence is exerted in all these cases on the ideasystem of the recipient group, but this influence is by no means subversive of the idea-system affected. The new elements enter into the old system, modifying and being in turn modified by it, but do not effect its disintegration; for, although any idea-system is a co-ordinated whole, separate new ideas may be taken over gradually to an almost unlimited extent without affecting its predominant characteristics. This is notably the case where material objects or mechanical inventions are concerned, and the introduction of the horse and gun no more revolutionized the American Indian's ways of thinking and acting than the telephone and aeroplane have upset our own conventionalized philosophy of life. A small body of immigrants may thus have an influence on the recipient group out of all proportion to their number, and it would be wholly impossible to understand the present condition of mankind

without taking the process of modification by contact into consideration.

Nevertheless, when we turn to apply this process to the special problem of advancement exemplified concretely in the European civilization of the present—it affords no direct explanatory assistance. The reason is not far to seek, for while the contact process may tend, theoretically, to bring all groups to the level of the highest, it cannot serve to place any one group far in advance of the rest. Even supposing that the intruding few, like the British in India, could raise the recipient many to a level with themselves (which may be regarded as an impossibility), this would not raise the status of the more advanced group to which the intruders belong. We may say, therefore, that, in the endeavor to discover how men everywhere have come to be as they are today, we must take into account the operation of a whole series of modifying processes, but we must admit further that these processes do not provide an explanation of the emergence of higher idea-systems.

6. In approaching the problem of "change," it is above all things important that the investigator should be on his guard against the widely dis-

seminated idea that human advancement has been due to human volition. We must beware of projecting ourselves and our modern intellectual interests into the past, and of imagining ourselves freed from the limitations under which, as we are quite ready to admit, our forefathers labored. The exercise of the will is not a recent acquirement, and today, as formerly, men are largely unconscious of the factors and processes that lie back of their most consciously determined resolutions. No theory of advancement that is based upon a supposed desire for betterment can be accepted as explanatory of how man has come to be as he is. Primitive man is not engaged in a struggle to emancipate himself from tradition; his efforts are not directed to the inauguration of change, but to the maintenance of the existing status—and it takes some radical upheaval to disturb his confidence in his own ways. Again, despite the prepossessions we unconsciously absorb from an acquaintance with biological discussions, we must avoid the assumption that human history displays any such regular and even process of change as is postulated in the Darwinian conception of "evolution." This supposition leads inevitably to theories of slow un-

broken progress directed towards some determinable end, but the evidence before us provides no basis for optimistic philosophizing. What we find actually throughout the course of history are the unmistakable results of constant processes manifested in fixity or persistence, tempered by other processes which gradually effect a modification of this rigidity. In addition to these two sets of processes, however, there is abundant evidence of the fact that at different times and in different places certain events have led to significant changes in the groups affected, and that these changes stand in direct relation to the phenomenon of "advance."

Investigation in different fields of the study of man has led many contemporary scholars—Petrie, Haddon, Rivers, Mackinder, Hogarth, Myres, Temple, Balfour, Smith, Hall, Jastrow, Sollas, to mention but a few—to observe that human advancement has followed upon the collision of different groups. Pieced together, the conclusions arrived at so far may be summarized in the statement that definite advance has taken place in the past when a group, forced from its habitat, ultimately by a change in climate, has been brought into collision with another differ-

ing from it considerably in culture, and has remained upon the invaded territory. It is probable that this statement as a whole would not receive unquestioned support from all those who have contributed to it in part; on the other hand, it is to be understood that the palaeontologist, geographer, anthropologist, archaeologist, or historian, as the case may be, has arrived at his conclusion, one may say, incidentally, and has not turned aside from the matter in hand to give this generalization independent consideration. Thus in any given instance it might be sufficient to say that "the dispossession by a newcomer of a race already in occupation of the soil has marked an upward step in the intellectual progress of mankind," without pursuing the question further. As a consequence, the conclusions, even in the consolidated form here given, have not been carried to a point at which they might constitute an hypothesis explanatory of human advancement.

Indeed, it is only when we take a further step, and come to ask how conceivably usurpation of territory, or war, or admixture of peoples could affect intellectual advancement, that the underlying problem is brought to light. It cannot well

be assumed that either the intermarriage of different stocks or the struggle of battle will of itself bring about this result; and while it is said that "if you would change a man's opinions—transplant him," it does not follow that the change will be effected by the scenery. In short, the "change" that leads to advancement is mental. What, then, is of importance to notice is that when enforced migration is followed by collision, and this by the alien occupation of territory, there ensues as a result of the conflict the breaking down or subversion of the established ideasystems of the groups involved in the struggle. The breakdown of the old and unquestioned system of ideas, though it may be felt as a public calamity and a personal loss, accomplishes the release of the individual mind from the set forms in which it has been drilled, and leaves men opportunity to build up a system for themselves anew. This new idea-system will certainly contain old elements, but it will not be like the old, for the consolidated group, confronted with conflicting bodies of knowledge, of observances, and of interpretations, will experience a critical awakening, and open wondering eyes upon a new world. Thus it is not the physical contact of men

that is of supreme importance in human advancement, but the overthrow of the dominance of the traditional system in which the individuals composing the group have been trained, and which they have unconditionally accepted; though advancement seems rarely to have been possible, in the past, save when diverse groups have been set face to face in desperate struggle.

Here, then, is a process which differs essentially from those previously described, for it is manifested only when some exterior disturbance or shock has, for the time being, weakened or overcome the influence or effect of the previously described processes; when manifested, however, this process is the same in all cases. The hypothesis required may now be stated in the form that human advancement follows upon the mental release, of the members of a group or of a single individual, from the authority of an established system of ideas. This release has, in the past, been occasioned through the breaking down of previous idea-systems by prolonged struggles between opposing groups which have been brought into conflict as a result of the involuntary movements of peoples. What follows is the building up of a new idea-system, which is not a simple

cumulation of the knowledge previously accepted, but the product of critical activity stirred by the perception of conflicting elements in the opposed idea-systems.

7. The foregoing statement describes only in the most general terms the processes manifested in human history, and should be regarded merely as indicating directions in which investigation is required, for, as must be readily apparent, each of these sets of processes demands careful analysis. While this further analysis will not be continued here, it is of some importance for us to arrive at an understanding as to the means which may be employed to verify the results obtained.

It was stated earlier that any theory of how man has come to be as he is must be applicable to all human groups, "backward" as well as "advanced"; must apply to the "backward" and "advanced" members of all groups, and hence must apply to the experience of the individual in the world today. It follows, therefore, that the processes indicated above are operative in our several individual lives, and, consequently, that the accuracy of the description may be tested by each investigator from the resources of his own personal observation. This, it must be clearly

understood, does not mean that the individual is in a position to discover the processes manifested in history through introspection; it does mean, on the other hand, that, when results have been arrived at through the scientific study of the past, these results may be verified by reference to what is going on within and around us in the present.

Thus, for example, if we consider the processes manifested in the fixity and persistence of ideasystems and ways of doing things, no one can be at a loss to discern the influence upon himself of the community in which he has grown up. From the beginning of life each one of us has been subjected to a discipline by those surrounding us which has determined and defined the avenues open to us for self-assertion or individual purposive activity. Again, each one of us is conscious of explicit restrictions in mental activity due to the particular selection of information and ideas which has been imparted to him at the outset of his career; the mental equipment which each one receives represents only a limited selection from the whole body of knowledge at the command of the group, and yet this selection, which under any other circumstances whatever would have

been different, has been, and must remain, a dominant factor in our lives.

Notwithstanding the tenacity with which we cling to mental habits once acquired, our ideas and ways of doing things are continually undergoing modification, the actuality of which we may also verify by direct observation. Indeed, this process is particularly noticeable in advanced groups, for in these, while group discipline is effective in maintaining a certain uniformity in external behavior, the idea-systems of individuals vary within wide limits. This variability is due, primarily, to the vast extent of the intellectual heritage of modern groups. Among ourselves, the body of knowledge immediately available is so great that its complete transmission to any individual is wholly unthinkable. It follows that, in modern groups, the participation of the individual in the group idea-system is irregular and incomplete, and that under actual conditions each member of a given community acquires a personal system of ideas which differs considerably from that of his fellows, though drawn from the same source. As a consequence, the contact of individuals, being accompanied by the interchange of differing personal views, leads

to a continual criticism and modification of our outlook upon the world; and, indeed, the attitude which we regard as specifically characteristic of members of advanced groups is a wide tolerance of these differences in ideas, and a conscious admission of the merely tentative validity of our most cherished convictions.

Every individual, then, may verify from his own experience the actuality of the processes which are manifested, first, in the persistence, and, second, in the slow modification of ideas and ways of doing things, but the case is different when we come to consider the processes and factors of change and advance. As we have seen, change ensues upon a condition of relative fixity through the interposition of shock or disturbance induced by some exterior incident. Now, while, historically, advancement has been dependent upon the collision of groups, the resultant response has taken place in the minds of individuals, and so we are led to see that all transitional eras are alike in being periods of individual mental awakening, and of the release or emancipation of individual initiative in thought and action. This applies equally whether we consider the past or the present, and, consequently, since

the antecedents of advance are realized only in exceptional cases, we are forced to rely, for the verification we are now discussing, upon the testimony of exceptional individuals. That the historical process of individualization of thought is also the form through which advancement proceeds today would best be shown by an extended examination of the biographies of notable men, but for the present we may accept the evidence adduced by psychologists and other investigators who have already called attention to the facts.

In reality, there is nothing abstruse about the processes involved, for, primarily, as S. A. Cook has pointed out, we hold ideas simply because nothing has occurred to disturb them; the fact is, in the words of Sir Oliver Lodge, that unless we encounter flaw or jar or change, nothing in us responds. So Bateson, seeking for an alternative to the method of Darwin, has proposed to "consider how far we can get by the process of removal of what we may call 'epistatic' factors, in other words those that control, mask, or suppress underlying powers and faculties." "I have confidence," he says in the course of this inquiry, "that the artistic gifts of mankind will prove to be due not to something added to the make-up of

an ordinary man, but to the absence of factors which in the ordinary person inhibit the development of those gifts. They are almost beyond doubt to be looked upon as releases of powers normally suppressed." It is, however, in the later writings of William James that the subject receives fullest consideration. Reviewing Herbert Spencer's Autobiography, he says, "Mr. Spencer himself is a great social force. The effects he exerts are of the nature of releases—his words pull triggers in certain kinds of brain." "In biology, psychology, and sociology," he continues, "the forces concerned are almost exclusively forces of release." Furthermore, at this point one might well incorporate entire his remarkable essay on "The Energies of Men." In this he points out that "as a rule men habitually use only a small part of the powers which they actually possess and which they might use under appropriate conditions." "We are all," he says, "to some degree oppressed, unfree. We don't come to our own. It is there, but we don't get at it." The inhibition is due to the influence of convention, and he remarks that "an intellect thus tied down by literality and decorum makes on one the same sort of impression that an able-

bodied man would who should habituate himself to do his work with only one of his fingers, locking up the rest of his organism and leaving it unused." To what, then, he asks, do men owe their escape? and to what are improvements due, when they occur? In general terms, he says, the answer is plain: "Excitements, ideas, and efforts are what carry us over the dam." Ideas, in particular, he regards as notable stimuli for unlocking what would otherwise be unused reservoirs of individual initiative and energy. This effectiveness he ascribes to the fact, first, that ideas contradict other ideas and thus arouse critical activity, and, second, that the new ideas which emerge as a result of this conflict unify us on a new plane and bring to us a significant enlargement of individual power. Thus, in complete unconsciousness of the historical aspect of the subject, James has described, from the point of view of the individual, what proves to be the essential element in the process through which human advancement has everywhere been made.

8. We are now in a position to recognize the nature of the processes which have been operative throughout human history, and to see how the actuality of these may be verified under pres-

ent conditions. It must be repeated, however, that the statement here given is of the most general character and that continued research, entailing the minute examination and comparison of eras of transition, will be required to determine fully and completely the elements of History. Nevertheless, it may be urged that the mode of procedure here outlined brings into one connected view bodies of fact which have hitherto remained disparate and intractable, and that it opens up new problems and new fields of inquiry for historical investigation. Indeed, even to the student who regards the construction of narratives as the sole and proper aim of History, it offers new phases of interest, suggests new aspects of human activities, and provides a basis for the treatment of "general" history which renders him independent of time-honored philosophies.

Nor is it to be overlooked, in considering the possibilities of this approach to the study of how man has come to be as he is, that, in addition to the stimulus it may afford to History, it makes feasible a mutual understanding and co-operation between the different specialties of humanistic study. It must be admitted, I think, that the manner in which studies like anthropology, his-

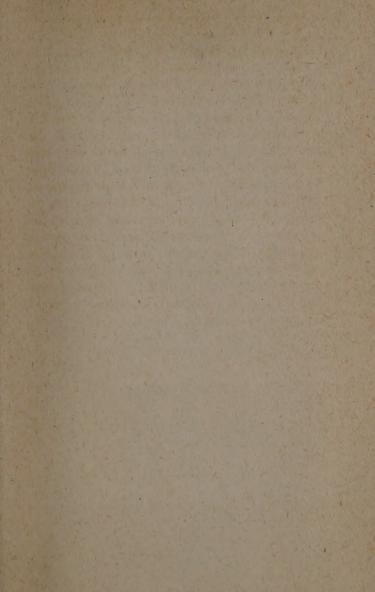
tory, and geography, art, literature, and religion, philology, politics, and economics have been carried on in separate compartments has not been conducive in the highest degree to the advancement of knowledge. These subjects are not independent sciences; they are aspects of the study of man which have been pursued in comparative isolation because of the circumstances of their several origins, and because they have not been brought into relation by a common methodology. On the other hand, when it is seen that the undertaking in which they are one and all engaged is the attempt to determine how the idea-systems of men have come to be as we find them today, the fundamental unity of these studies at once becomes apparent; and, indeed, as an illustration of this unity, one might well agree with the sentiment (though certainly not with the wording) of Ostwald's statement that the history of the sciences furnishes the best and most trustworthy materials for the study of the laws that govern the development of humanity.

Finally, the method herein described brings the study of History into direct relation with the problems of life. I have indicated that, throughout the past, human advancement has, to a

marked degree, been dependent upon war. From this circumstance, many investigators have inferred that war is, in itself, a blessing-however greatly disguised. We may see, however, that this judgment is based upon observations which have not been pressed far enough to elicit a scientific explanation. War has been, times without number, the antecedent of advance, but in other cases, such as the introduction of Buddhism into China, the same result has followed upon the acceptance of new ideas without the introductory formality of bitter strife. As long, indeed, as we continue to hold tenaciously to customary ideas and ways of doing things, so long must we live in anticipation of the conflict which this persistence must inevitably induce.

It requires no lengthy exposition to demonstrate that the ideas which lead to strife, civil or international, are not the products of the highest knowledge available, are not the verified results of scientific inquiry, but are "opinions" about matters which, at the moment, we do not fully understand. Among modern peoples, the most important of these opinions are concerned with the ordering of human affairs; and in this area all our "settlements" of the problems which con-

front us must continue to be temporary and uncertain compromises until we shall have come to apply the method of science in their solution. Science is not a body of beliefs and opinions, but is a way or method of dealing with problems. It has been said by a notable contemporary that men begin the search for truth with fancy, after that they argue, and at length they try to find out. Scientific method is the term we use for the orderly and systematic effort to find out. Hitherto, the most serious affairs of men have been decided upon the basis of argumentation, carried, not infrequently, to the utmost limits of destruction and death. It should be possible to apply in this domain the method of finding out, and it has been my hope to contribute, in however tentative a manner, to this end.





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